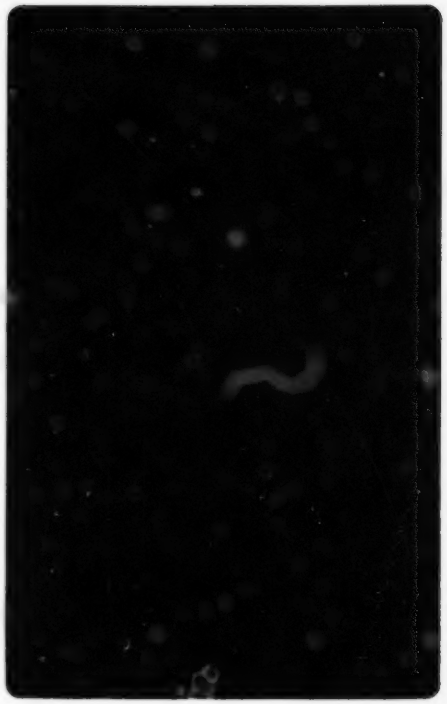
Leaving School or Continuing:
What Makes the Difference?



NOVA SCOTIA
Community Services

The Family Mosaic

Leaving School or Continuing:
What Makes the Difference?

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Canadian Cataloguing in Publication Data

Dechman, Margaret K. (Margaret Kathleen)
The family mosaic. Leaving school or continuing: what makes the difference?

Prepared by Margaret K. Dechman
Includes bibliographical references
ISBN 0-88871-638-9 (set) - ISBN 0-88871-737-7 (v. 7)

Cover design: Chris Cairns

The Social Development Partnerships Program of Human Resources Development Canada and the Nova Scotia Department of Community Services are pleased to have provided financial support and consultation to this project

This document expresses the views and opinions of the author and does not necessarily represent the official policy or opinion of Human Resources Development Canada, the Government of Canada, the Nova Scotia Department of Community Services, or the Nova Scotia Government

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Table of Contents

Introduction 1

Policy and Research Context 3

- Characteristics of the Child 5
- Family Structure and Resources 6
- Social and Cultural Capital 7
- Social Exclusion 10

Findings from the Family Mosaic Project 13

Educational Attainment 13

The Child 15
- Cognitive Ability 15
- Self Concept 18

The School
- Performance in the School Context 18

Structural Characteristics of the Family
- Lone Parenting 27
- Family Stability 29
- Mother's Age 31
- Mother's Education 33
- Mother's Employment 35
- Poverty 38
- Residential Stability 39
- Adequacy of Living Accommodations 40
- Most Influential Structural Factors 42

Family Dynamics 43
- Support for Child Rearing 43
- The Mother/Child Relationship 45
- Support with School Work 49
- Relationship Between Home and School 50
- Mother's Opinions About Schooling 54
- Extracurricular Activities 56
- Family and Community Relationships 60

Summary of Key Points 62

Discussion 66

Notes 71

Sources 75

Appendix A 82

Appendix B 108

Introduction

Over the last generation, fertility rates have dropped below replacement level, the percentage of children born into single-parent families has increased substantially, divorce rates have multiplied ten-fold, and women's labour-force participation rates have quadrupled (Dechman, 1995). The magnitude and speed of these changes have left us without a clear picture of what today's families really look like. Family life is both varied and dynamic. There are one and two-parent families; single and dual-earner families; blended, nuclear, and extended families. Families can be two-parent today and one-parent tomorrow; single-earner today and dual-earner tomorrow.

The Family Mosaic Project (FMP) provides policymakers, practitioners, and the public with information about the ever-changing realities of life in both one and two-parent families as children grow from infancy to adulthood. This project started over twenty years ago with a sample of 716[1] mothers who gave birth to their first child in a Nova Scotia hospital in 1978. The original sample was stratified on the basis of marital status. Half of the mothers were married when their first child was born and half were single when their first child was born. By drawing two comparable samples of married and single mothers, it is possible to give statistically-reliable estimates of outcomes for both family types. Weighting the data to compensate for the over-representation of single mothers also makes it possible to provide information on families in general.

Data collections for this project were conducted when the children were approximately 6 weeks, 9 months, 18 months, 10 years, and 20 years of age. The 6-week, 9-month, and 18-month data collections consisted of personal interviews with the mothers. The 10-year data collection consisted of personal interviews with mothers and psychological assessments of a sample of 223 of the children. The 20-year data collection consisted of telephone interviews with both the mothers and their sons or daughters, who were, by then, young adults. Seventy percent (N = 500) of the mothers who started the project in 1978 were still involved in the 1999 data collection. Eighty-six percent (N = 428) of the sons/daughters of these mothers also participated in the 1999 data collection. More detailed information on the study design and

associated questionnaires can be found in the Methodology Report for the FMP.

This report on the educational attainment of youth is part of a larger series of reports including:

- The Dynamics of Family Life
- Educational Profiles of Mothers
- Employment Profiles of Mothers
- Social Exclusion and Social Assistance
- Social Exclusion and the Health of Mothers and Young Adults
- Psychological Outcomes and Coping Strategies
- The Experiences of Young Adults Leaving School Early
- Youth Employment: Entering the Labour Market

Policy and Research Context

Educational attainment has been the focus of much research and policy debate because of its significant connection to individual, social, and economic well-being. People with low levels of education are:

- less likely to be employed,
- more likely to be living in poverty,
- less involved in social and political activities,
- suffer more psychological and physical health problems, and
- accrue higher health care and social assistance costs (de Broucker and Lavallée, 1998: 11; Herrnstein and Murray, 1994: 266; Clark, 2000; Grindstaff and Balakrishnan, 1991; Lafleur, 1992; HRDC, 2000).

In the 1960s, education formed the cornerstone of the "war on poverty" in the United States (Zigler and Styfco, 1996). The promotion of educational achievement was looked to as the great equalizer that would serve to dissolve, or at least diminish, racial and other inequities. Unfortunately, political support for Head Start and other educational initiatives that grew out of the "war on poverty" waned as economic constraints took their toll and the complexities involved in actually improving the educational achievement of disadvantaged children became increasingly apparent (Zigler and Styfco, 1996). More recently, the growth of knowledge-based economies has brought a resurgence of interest in the area of education. Human resource development is now looked to as the basis for global competitiveness,

offering hope of prosperity both to Canadians and others across the globe (Istance, 1997: 27; Torjman, 2000).

Evaluations related to the "war on poverty" programming demonstrated that the improvement of children's educational attainment required much more than simple direct investments in improving cognitive functioning (Zigler and Styfco, 1996; Sylva, 1994). Following this recognition, educational research shifted from the examination of IQ to considerations of the social and cultural determinants of success. There is now increasing evidence that educational attainment can most fruitfully be understood as a process that includes many inter-related and changing conditions with respect to the student, their family, and the school context (O'Connor, 1985; Timberlake, 1982; Baker, 1991; Rush and Vitale, 1994; HRDC, 2000; Tanner, 1990).

This paper outlines, and empirically examines, the basic underlying theses of four primary perspectives on educational attainment:

- characteristics of the child
- family structures and resources
- social and cultural capital
- social exclusion

Whereas these four areas are presented separately for clarity of presentation, there is much overlap and blurring both theoretically and in the real world. This report does not aim to uncover the magic bullet for educational reform, but rather discusses the multiplicity of conditions that interconnect to affect educational outcomes for youth.

Characteristics of the Child

The most intuitive explanation for variations in educational attainment is usually variations in intellectual ability. There have been longstanding debates about the extent to which intellectual quotient (IQ) is environmentally versus genetically determined, the cultural biases of IQ testing, and the relative importance of such intellectual capacities in determining educational and employment outcomes (Connors, 1995; Kirby, 1995; Coulter, 1995). These debates came to a head in Herrnstein and Murray's book *The Bell Curve* (1994). In this book, the authors argue that well-being in the modern world is becoming increasingly linked to cognitive ability. "The more complex a society becomes, the more valuable are the people who are especially good at dealing with complexity" (Herrnstein and Murray, 1994: 99).

Most critics highlight Herrnstein and Murray's emphasis on genetic determinism (Connors, 1995; Kirby, 1995; Coulter, 1995), however, the authors themselves maintain that they have a more balanced view. In the final analysis, they argue that both socio-economic conditions and innate ability interact to affect school achievement (Herrnstein and Murray, 1994: 144 -165).

In addition to discussions of IQ, other psychologists have focused on the role of behavioural attributes as mediating the intellectual - achievement link. For example, Attention Deficit/Hyperactivity Disorder (ADHD) has been identified as a primary factor underlying the difficulties students experience in the school system and throughout life (Barkley, 1998). Essentially, this perspective focuses attention on the behavioural characteristics that are required to utilize intellectual ability.

The psychological literature also presents self concept and locus control as additional foundations for success (Lee and Burkam, 1992). From this perspective, children require positive perceptions of themselves and a sense that success relates to effort rather than arbitrary external circumstances. There is a substantial literature describing the processes by which children develop their sense of self through interaction with other people (O'Connor, 1985; Jenkins and Keating, 1998) . Children require reinforcement from adults in both their families and schools if they are to develop a positive self image and a belief that they can achieve.

While the psychological literature on achievement provides an understanding of the dynamics of cognitive, behavioural, and self-concept formation, there is increasing awareness that these developmental processes are inextricably intertwined within larger family, school, economic, and social contexts (Breen and Goldthorpe, 1997). Hence, individual intervention cannot be expected to provide the complete answer to issues of inequality and disadvantage.

Family Structure and Resources

There are few who have not been sensitized to the role family structure plays as a foundation for educational achievement (Milne, et al, 1986; Teachman and Paasch, 1997). While there is little disagreement over the fact that children in lone-parent families have reduced educational outcomes (Frederick and Boyd, 1998; Brooks-Gunn, Guo and Furstenberg, 1993; Williams, 2001), there is much less clarity about what this association really means. The most common understanding of the connection between lone parenting and poor outcomes for children relates to the disruptive effects of divorce (Tuzlak and Hillock, 1991). However, a closer examination reveals that lone-parent families formed because the mother was not married when the child was born are typically more

disadvantaged than lone-parent families formed through divorce (Murray, 1995).

Understanding the association between lone parenting and child outcomes is further complicated by a lack of precision in distinguishing among the highly correlated but distinct issues of lone parenting, teen parenting, and family stability (Wojtkiewicz, 1993: 702). For example, a much higher proportion of single than divorced or continuously married mothers had their first child in their teens (Dechman, 2000). Could the comparatively negative outcomes for children of single mothers relate to the effects of age rather than lone parenting *per se*? (Milne et al., 1986) It is also clear that children born to single mothers tend to experience significantly more changes in their family structure over the course of their lives than do children born to married mothers. Results from the Family Mosaic Project (FMP) indicate that while 30 percent of married mothers divorce, 90 percent of single mothers marry or form common-law relationships. Again, is it lone parenting or the associated instability of the family unit that is most influential in predicting child outcomes?

Understanding the effect of lone parenting is further complicated by the pronounced association between family structure and income (Astone and McLanahan, 1994). The negative effects of poverty on educational outcomes are well known and there is a very high prevalence of poverty among lone-parent families (Ross, Scott and Smith, 2000).

Social and Cultural Capital

If one wishes to move beyond description into the realm of policy formation, it is not enough to simply state a connection between certain variables, rather it is necessary to understand the process by which structural

conditions translate into real-life outcomes. As previously mentioned, the initiatives undertaken within the "war on poverty" era in the United States were abandoned, not so much because they were misdirected, but rather, because they failed to encompass the full complexity of the social, as well as cognitive, barriers to success in the school system.

More recent theories have directed attention beyond purely structural and economic characteristics to an examination of social and cultural issues. Bourdieu and Passeron (1990), and those following the cultural capital perspective, emphasize the lack of fit between family and school norms. Coleman (1987), and those following the social capital perspective (Aucoin et al, 2001), focus on the availability of social supports and social networks required to provide the discipline and guidance needed by children.

From Bourdeiu and Passeron's (1990) perspective, educational attainment is a function of the cultural milieu into which the child is socialized in his/her family. This cultural milieu is determined primarily by parental education, occupation, and income. "Cultural capital is generally defined as proficiency in and familiarity with dominant cultural codes and practices - for example, linguistic styles, aesthetic preferences, styles of interaction" (Aschaffenbury and Maas, 1997: 1). Essentially, lower-class children are viewed as developing normative, communicative, and behavioural patterns that run contrary to a school system dominated by middle-class standards and middle-class teachers (Davies, 1999: 144). There is clear and consistent evidence that mothers' educational attainment is one of the primary determinates of educational outcomes for their children and this usually forms the basis of cultural capital arguments (Davies, 1999: 142; Haveman, Wolfe, and Spaulding, 1991; Lipman, Boyle, Dooley and Offord, 1998; Frederick and Boyd, 1998; Broucker and Lavallée, 1998).

Coleman (1987, 1988) and the social capital perspective stress the investment of time and energy in child rearing by parents, other family members, and the community. From this perspective, parental educational attainment and cultural capital are only of value if they are transmitted through quality time and attention.

Whereas Herrnstein and Murray (1994) focus on a downward drift in cognitive capacity, Coleman (1987) emphasizes the diminution of family time and a shifting of emphasis away from family responsibilities to employment and self fulfillment. He argues that today's children suffer from both time and emotional deficits because parents have become too focused on themselves and their jobs. Industrialization first deprived children of their father's influence, as men moved into factories and offices far removed from their homes (1987: 33). More recently, the same has become true of mothers, as women have assumed increasing employment commitments (Coleman, 1987: 33). With a majority of children now living in lone-parent or two-parent dual-earner households, no one any longer has time for child rearing.

> Social capital within the family that gives the child access to the adult's human capital depends both on the physical presence of adults in the family and on the attention given by the adults to the child. The physical absence of adults may be described as a structural deficiency in family social capital. The most prominent element of structural deficiency in modern families is the single-parent family. However, the nuclear family itself, in which one or both parents work outside the home, can be seen as structurally deficient, lacking the social capital that comes with the presence of parents during the day, or with grandparents or aunts and uncles in or near the household. (Coleman, 1988: 111)

In addition to decreasing time for children in the home, extended family and community-support networks are being further undermined by increased residential mobility (Coleman, 1988: 116).

Much of the research and policy recommendations initiated by the social capital model has focused on parental involvement in educational processes (Muller, 1993; McNeal, 1999; Standing, 1999). Many authors stress the importance of parents not only helping with homework but also becoming more directly involved in the school system (Muller, 1993). However, an intensive year-long study in the United States demonstrated that the promotion of parental involvement in the school may serve to enhance rather than diminish existing racial and class divides (McGrath and Kuriloff, 1999: 603). Those mothers whose children already have the most privileged socio-economic positions are those who have the most time and confidence required to participate in school activities, this enhanced involvement then further accentuates the exclusion of less-advantaged families (McGrath and Kuriloff, 1999; Standing, 1999).

Social Exclusion

Whereas the preceding sections focus on variations in resources that are either inherent to the child in the form of cognitive ability, behavioural adjustment, or self esteem, or can be drawn from his/her family in the form of parental education, income, or social support, the social exclusion perspective directs attention away from the provision of utilitarian resources to a more generalized question of social perceptions and belonging (Sylva,1994; Eggert et al., 1992).

In contrast to the psychological literature emphasizing "behavioural disorders" or "problems" of the child, the social-exclusion perspective focuses more on teachers' perceptions, interpretations, and actions in relation to the child's behaviour (Beacham, 1982; Jenkens, and Keating, 1998). The controversy over retention versus social grading provides a clear example of the process of exclusion in the school system (Afolayan, 1991). The basic argument for

grade retention is that another year will help the student "catch up" either socially or cognitively. Unfortunately, studies have shown that such an approach may in fact have the opposite effect (McLaughlin, 1999; Rumberger, 1995). If, through grade retention, the child loses confidence in his/her ability to learn or comes to see him/herself as not fitting in, the associated loss in motivation can far outweigh the positive effects of repeating the curriculum.

Additional support for the importance of social inclusion comes from research related to the association between involvement in extracurricular activities and school success (McNeal, 1995; Mahoney, and Cairns, 1997; Baker, 1991). While sport, drama, dance, and other activities may have little to do with academic curriculum, they provide a means of bolstering self concept and attachment to the school system. Participation on teams or in other school-based groups may be particularly important for children whose attachments to school are weaken by poor academic achievement (Mahoney, and Cairns, 1997).

While there is substantial literature examining the effects of school environment, the consequences of exclusion in the home environment are less well understood (O'Connor, 1985). As Silver points out, social exclusion can occur in different domains of life (1994: 9). It is also possible that exclusion in one area may spill over or reinforce exclusion in another area. For example, family problems may be magnified by complaints from the school or vice versa, with the final result being that the child comes to feel there is nowhere that he/she belongs.

The social-exclusion perspective not only examines the processes by which cognitive, resource, cultural, and social capital are translated through acceptance within the school system, but also links back to psychological

issues of self concept and locus of control. What happens to children who do not experience positive reinforcement either at home or at school?

Findings from the Family Mosaic Project

While this report provides some basic information on educational outcomes in the area of technical/vocational training, university attendance, and total years of schooling, the primary focus is on factors relating to departure from the school system before completing grade 12.[2] "High school may not be enough" (HRDC, 1998) to secure a job, but the lack of high school almost guarantees the converse (Baer, 1999: Fortune et al., 1991; Bowlby and McMullen, 2002: 19). As mentioned in the introduction, people who have not completed grade 12 experience a variety of negative economic, social, and health outcomes.

Educational Attainment

It is not possible to make direct comparisons between the educational attainment of mothers and their children in the FMP because the mothers cover a range of age cohorts, whereas the children were all born within the same year. However, it is clear that the findings from the FMP are in keeping with other information that demonstrates significant improvements in educational attainment during the time period covered by this research (Clark, 2000). When the mothers in this project gave birth to their first child in 1978, approximately 58 percent had completed Grade 12. In comparison, 90 percent of their children had completed grade 12 by the time they reached their early twenties.

One might expect that the pronounced increase in high-school completion would have been accompanied by the virtual disappearance of youth leaving the school system with only junior high credentials. However, results from the FMP indicate that thirty percent of the youth who left school had completed

nothing higher than grade 9. This is consistent with national figures from the School Leavers Survey indicating that 32 percent of those who had dropped out of school had grade 9 or less (HRDC, 2000: 14).

While gender differences have all but disappeared for some Canadian provinces, in Nova Scotia, young men are still more likely to leave the school system than are young women (Bowlby and McMullen, 2002: 26). Fourteen percent of the young men as compared to 11 percent of the young women in the FMP left the school system at some time before completing grade 12. Even though young women were generally less likely to leave school, gender differences were not evident in the percentage of early school leavers who first left before grade 10, 31 percent among females and 29 percent among males.

There are gender differences in the reasons given for leaving school. Girls most frequently mention personal reasons which often relate to relationship issues or pregnancy. Boys, on the other hand, are more likely to indicate they left school because they were struggling with the course material or wanted to make money (Appendix A, Table 1.1).[3]

Approximately one quarter of both the young women and the young men involved in the FMP had taken some type of technical or vocational training by the time they reached their early twenties (Appendix A, Table 1.2). Young women were, however, more likely to have pursued university studies:

- 54 percent of young men, and
- 64 percent of young women had attended university at some time (Appendix A, Table 1.3).

By the time they reached their early twenties, young women had completed an average of 13.4 years of schooling and young men had completed an average of 13.0 years of schooling (t = 5.14***).[4]

As mentioned in the introduction, the process of early school leaving is probably initiated and fueled by a number of different interactive forces originating from the child, the home, the school, and the larger community. The following sections will review characteristics of the early school leaving process from the perspectives of:

- the child's cognitive abilities and self concept,
- the school's performance-rating system and general practices,
- resources of the home environment related to family structure, poverty, and residential mobility,
- parenting practices and involvement in the community.

The Child

Cognitive Ability

At the time of the 10-year data collection for the FMP, a number of achievement tests were administered with a subsample of 223 of the children:

- the Wechsler Intelligence Scale for children - Revised (WISC-R) to determine their intelligence quotient (IQ)

- the Peabody Picture Vocabulary Test - Revised (PPVT-R) to determine their vocabulary

- the Basic Achievement Skills Individual Screener (BASIS) to determine their current academic achievement in reading, math, spelling, and writing

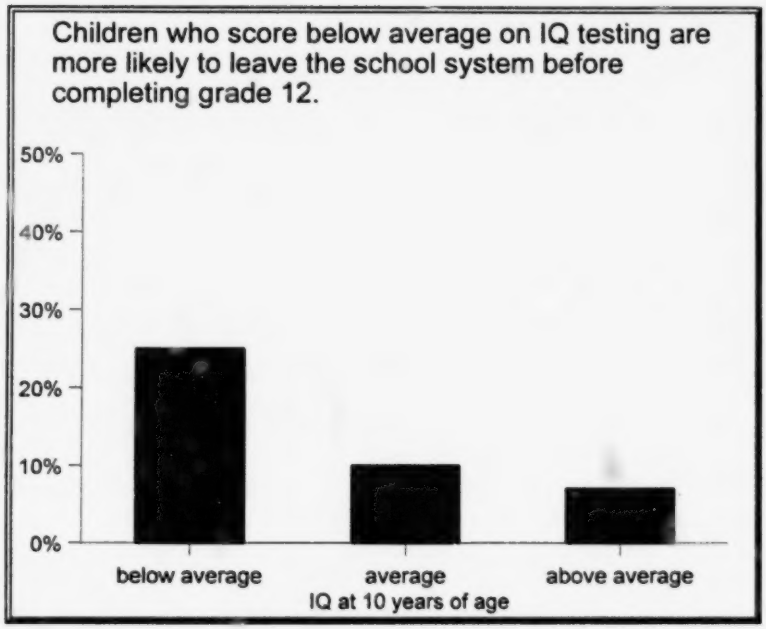
- the Beery Visual Motor Integration Test (Beery) to determine their level of hand/eye co-ordination.

The WISC-R is one of the most widely recognized measures of IQ and includes both Verbal and Performance subscales.

> The Verbal Scale is dependent on the child's accumulated experience. It usually requires the child to give a response that is in his or her repertoire. The questions are presented verbally, and the responses are given orally. The Verbal Scale might be considered to be an index of verbal ability and crystallized intelligence.
>
> The Performance Scale, in contrast, is more dependent on the child's immediate problem-solving ability. It requires the child to meet new situations and apply past experience and previously acquired skills to a new set of demands. The stimuli are nonverbal, and most are presented visually. Solutions require motor responses and, to a lesser extent, verbal responses. The Performance Scale might be considered to be an index of nonverbal ability and fluid intelligence.
>
> Fluid intelligence refers to essentially nonverbal, relatively culture-free mental efficiency, whereas crystalized intelligence refers to acquired skills and knowledge that are strongly dependent for their development on exposure to culture (Sattler, 1988).

All of the measures of cognitive ability listed above are significantly correlated with the total number of years of schooling completed (Appendix B, Table 1).

Although somewhat weaker than at the university level, IQ is significantly correlated with early school leaving (Appendix A, Table 2.1).



A closer examination of the WISC-R subscales indicates stronger correlations of verbal ($r = -.23^{***}$) than performance measures ($r = -.13^{***}$) in relation to early school leaving. As described above, the verbal component of IQ is more closely tied to socio-economic status than is the performance component (Sattler, 1988). Results from the FMP show a correlation of .51*** between mother's education and the verbal WISC-R subscore and .31*** between mother's education and the performance WICS-R subscore.

While children with below-average IQ scores, and particularly below-average verbal subscores, have increased difficulty making it through the school system, it is important to keep in mind that this group represents a small portion of the student population and a minority of early school leavers. Twenty-one percent of youth who left the school system before completing grade 12 had scored low average on IQ testing and only 5 percent were at a level where one would expect them to experience serious difficulties with the curriculum. Most early school leavers (74 percent) had average or above IQ ratings (Appendix A, Table 2.2). Results from both the FMP and the national Youth in Transition Survey (Bowlby and McMullen, 2002) indicate that many school leavers had acceptable marks.

Cognitive ability clearly represents an obstacle to completing high school for some students. However, it is evident that other factors must also be considered if we are to more fully understand the dynamics of the school-leaving process.

Self Concept

In addition to assessments of cognitive abilities, the Piers Harris was used to monitor the child's self concept at 10 years of age. While this measure of self image was significantly correlated with both university attendance and the number of years of training completed, it showed no significant association with either technical/vocational training or early school leaving (Appendix B, Table 2).

The School

The extensive research literature on school climate indicates that the effects of characteristics of the child must be considered within the context of their interaction within the school environment (Beacham, 1982; Polakaw, 1993; Sylva, 1994). There is evidence that performance outcomes are significantly influenced by behavioural characteristics and teachers' perceptions as well as the child's cognitive abilities (Sylva, 1994; Jenkens, and Keating, 1998).

Performance in the School Context

The 10-year data collection for the FMP included the administration of Teacher Achenbach Behaviour Checklists. This instrument provides performance ratings in numerous subject areas as well as multiple behavioural indicators pertaining to the teacher's perceptions of the child's happiness, anxiety, withdrawal, popularity,

nervousness, aggressiveness, work effort, and an overall measure of the appropriateness of the child's behaviour at school.

The effects of cognitive ability on early school leaving are mediated through teachers' assessment of the child's performance (Appendix A, Table 3.1) which are as strongly influenced by behavioural ratings as they are by IQ (Appendix A, Table 3.2). The following quotes from teachers describe some of the dynamics of achievement within the school system.

> "Very verbal student. Seems to compete for the stage - wants first and last word often. Average achievement. If he concentrated on the program and not on personalities, he'd probably show an improvement on the scholastic side of school. Negative actions versus positive motives sometimes describes [this student]."
>
> "He does not always concentrate on what he is doing. He doesn't copy words correctly, lies down on his arm much of the time, as if he were tired. His mind is often on other things, such as toys (of which he has many) or what he'll be doing after school. I get the impression that school doesn't interest him too much."
>
> "This child is easily distracted. She finds school work difficult and although she is managing to keep up, it takes a lot of urging and extra push from the teacher."
>
> Very positive happy child since new tubes in ears in fall. Was whiny and sick. She is now excited and pleased about school."

Among both boys and girls, poor behaviour ratings increase the probability that the child will leave the school system before competing grade 12 (Appendix B, Table 3). However, sub-scale correlations indicate there may be gender differences in the particular dimensions of teachers' behavioural assessments that are most strongly correlated with early school leaving. While boys on average score higher on overactive and aggressive behaviour rating than do girls, negative assessments by teachers in these areas are

most strongly correlated with early school leaving among girls. Other research has found that aggressive behaviour is met with particularly harsh social sanctions for girls (Pepler, and Sedighdeilami, 1998).

Teacher's performance ratings also form the basis for grade retention. The FMP results indicate a correlation of r = .45*** between teachers' 10-year performance ratings and the probability of grade retention. Once students start to slip in the school system, their chances of making it through are substantially reduced.

- 35 percent of youth who repeated a grade, as compared to only

- 4 percent of youth who did not repeat a grade, left the school system at some time before completing grade 12 (Appendix A, Table 3.3).

A binary logistic regression including the teacher's 10-year behavioural assessment, the teacher's 10-year performance rating, the child's 10-year IQ rating, and whether or not the child had ever repeated a grade, indicates that repeating a grade has a strong independent effect on early school leaving (Appendix A, Table 3.4). This finding is consistent with the view that grade retention does more to detract from than to promote school completion.

If one selects those students who scored in the average or above IQ range at 10 years of age (ie. those who could reasonably be considered as having no innate cognitive impediment to completing school), repeating a grade is an indicator of what lies ahead (Appendix A, Table 3.5).

- 24 percent of those of average or above IQ who repeated a grade left the school system.

- 2 percent of those of average or above IQ who did not repeat a grade left the school system before completing grade 12.

While the first stages of the process of early school leaving are marked by teachers' negative assessments and the repetition of grades, later stages tend to include negative perceptions of the school system from the perspective of the student.

- students who felt their teachers did not think they would do well in life were 3 times as likely to leave school as were students who felt their teachers thought they would do well, (29 versus 8 percent) (Appendix A, Table 3.6).

- students who felt teachers sometimes did not deal fairly with students were twice as likely to leave the school system as were students who felt teachers dealt with students in a fair manner, (18 versus 9 percent) (Appendix A, Table 3.7).

- students who felt teachers were not usually encouraging were twice as likely to leave the school system as were students who felt teachers were encouraging, (18 versus 8 percent) (Appendix A, Table 3.8).

- students who did not feel comfortable asking questions in school if they did not understand something were twice as likely to leave the school system as were students who felt comfortable asking questions, (20 versus 9 percent) (Appendix A, Table 3.9).

- students who felt teachers discouraged students from expressing their opinions were 3 times as likely to leave the school system as were

students who felt teachers encouraged students to express their ideas, (29 versus 8 percent) (Appendix A, Table 3.10).

An index including the extended response categories for all five of the above aspects of the youth's perception of school was strongly correlated with early school leaving ($r = -.33^{***}$) (Appendix B, Table 3).[5]

The following comments reflect the effects teachers can have on their students.

There are things that help.

- " I had a drama teacher who totally brought me out. That was definitely good for me."
- "I had trouble familywise. My teacher helped me out, he is an excellent teacher and encouraged me not to quit."
- "She (the teacher) just always said I could do it. Even when I started with an attitude."
- "She (the teacher) always made sure everyone knew how to do the work - even going over it 3 or 4 times."
- "I wasn't doing well in a large class. I wasn't involved in it. I passed in a paper and got an A+. The teacher made a big deal about it and it gave the confidence and encouragement to do better in school."

There are things that do not help.

- "Teachers would help the good students and forget the bad ones, like you're a lost cause of something."
- "High school teachers encouraged the better students and discouraged the poorer students."

- One student who was doing well himself commented "The main thing I noticed was that if students had a bad record they were prejudged and always treated that way. Nobody gave them a chance to get out of it."
- "A teacher told me I was never going to graduate."
- "The guidance counselors were not very good at telling students what they could do, only what they couldn't do."

While most students feel safe at school, the minority who do not feel safe are at greater risk of not making it through grade 12.[6]

- 10 percent of those students who said they always felt safe at school,
- 15 percent of those students who said they usually felt safe at school,
- 23 percent of those who said they sometimes, not very often, or never felt safe at school, left the school system before completing grade 12 (Appendix A, Table 3.11).

When students are encountering difficulties, tipping the scale in favour of remaining in school requires focusing on their strengths and often making a supreme effort to attend to their particular needs.

Some students were supported.

- "I didn't feel safe at school one year. There were girls I didn't get along with, so I stopped going to school. The teachers brought my work to me and I made it through without dropping out. The next year was fine."
- "Principal very helpful. My daughter was having difficulty to the point we were considering holding her back in elementary school. Principal took an interest and requested teacher give individual attention and this turned her life around."

- "When my daughter was pregnant her teacher didn't criticize her. He talked to her and made her feel good and continue her education."

- "A grade 4 teacher turned my son from a failing student to an honour student. She saw potential and gave her time."

- "There was a teacher who helped my son with his self esteem. His coach was very helpful also."

- "My son was awarded a notable achievement award for class participation and work on school projects. It was good for the school to give recognition like that."

Other Students were not supported.

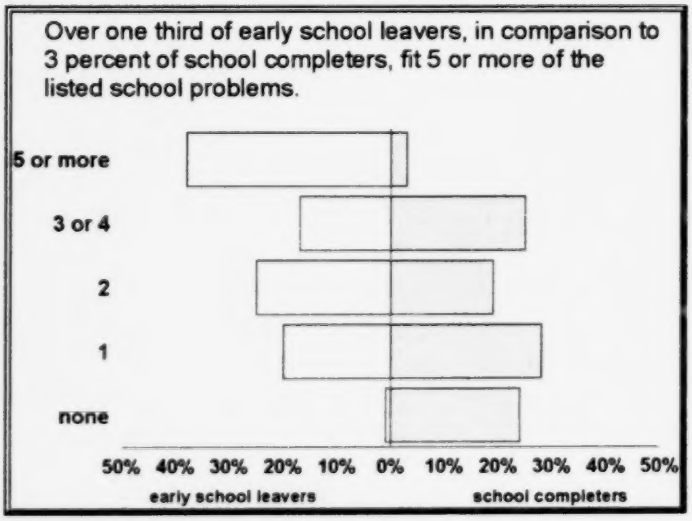
- "There was a teacher who really ruined my daughter's self esteem. He changed her. The way he spoke to her made her clam up and she became really shy."

- "A teacher wrote 5 pages explaining how my son wasn't going to succeed when he grew up. From that point on, I lost all faith in the school system."

- "My son was overlooked when he was doing his best. They should take notice when kids are trying their best and give them praise and encouragement so kids will have more self esteem. I feel he was marked unfairly in elementary school and they didn't try to make him learn. When he got to grade 9 a teacher took time with him and helped him a lot."

The following table summarizes the primary distinctions between the school experiences of those who did and did not complete grade 12.

	early school leavers	school completers
repeated grade	77%	19%
teacher gave below average performance rating at 10 years of age	48%	20%
teacher gave below average behaviour assessment at 10 years of age	55%	17%
felt teachers did not think they would do well in life	45%	14%
felt teachers were not encouraging	59%	35%
did not feel comfortable asking questions	42%	22%
felt teachers did not encourage students to express their opinions	40%	13%
felt teachers did not deal with students fairly	43%	25%
sometimes did not feel safe at school	38%	25%


Over one third of early school leavers, in comparison to 3 percent of school completers, fit 5 or more of the listed school problems.
5 or more
3 or 4
2
1
none
50% 40% 30% 20% 10% 0% 10% 20% 30% 40% 50%
early school leavers
school completers

Clearly, there is much more to schooling that simply the mechanics of instruction.

The next section on family environment demonstrates that the challenges early school leavers experience typically originate well beyond the school walls.

Structural Characteristics of the Family

The experiences, behaviours, and performance of children in the school system cannot be adequately understood in isolation from the family context. There are many aspects of the family unit that are hypothesized to affect the educational outcomes of children: mother's education, age, and employment patterns; family structure; poverty; residential mobility; and characteristics of the neighbourhood in which the family resides.

As mentioned in the introductory section, discussions of the effects of family environments are sometimes confusing because of a lack of conceptual clarity and the existence of inter-correlations among the most pertinent aspects. The FMP included measures of family structure based on: lone parenting, mother's age, and the relative stability of the family unit (Appendix A, Table 12.1). All three of these aspects of family structure are significantly correlated. Teenage mothers are more likely to be single than are older mothers. Single mothers tend to experience more changes in family structure than do married mothers. Furthermore, family structure is also closely linked to social and economic conditions. Mothers who find themselves raising children on their own have comparatively low levels of education and high rates of poverty. Poor families are also more likely to be residentially mobile. While each aspect of the family environment will be discussed independently,

the concluding section will describe the prevalence of concurrent and compounded disadvantage.

Lone Parenting

Consistent with much previous research (Milne, et al, 1986; Teachman and Paasch, 1997: 6, Frederick and Boyd, 1998; Brooks-Gunn, Guo and Furstenberg, 1993; Williams, 2001), the FMP demonstrated distinct differences between the educational patterns of youth who had lived in a lone-parent family at some time and youth who had lived continuously with two-parents.

- Twenty-five percent of youth who had lived in a lone-parent family at some time before they reached 18 years of age, in comparison to 5 percent of youth who had lived continuously in a two-parent family, left the school system before completing Grade 12 (Appendix A, Table 4.1).

- Youth who had lived in a lone-parent family at some time were also much less likely to attend university (42 percent) than were youth who had lived continuously in a two-parent family (68 percent) (Appendix A, Table 4.3).

- The only area in which lone parenting had no effect was with respect to the probability of pursuing technical or vocational training (Appendix A, Table 4.2).

By the time they reached their early twenties, young adults who had lived in a lone-parent family were at a distinct disadvantage in comparison to their counterparts who had lived continuously in a two-parent family. The average number of years of schooling completed by youth who had lived with a lone parent at some time was 12.7; whereas, the average number of years of schooling completed by youth who had lived continuously in a two-parent family was almost one full year higher, 13.5 ($t = 8.752^{***}$).[7]

An analysis of variance did not demonstrate any significant interaction between gender and lone parenting. The educational attainment of both young men and young women was diminished by living in a lone-parent family (Appendix A, Table 4.4).

Earlier reports from the FMP described many differences between lone-parent families based on the circumstances under which these families were formed. Mothers who were single when their first child was born had lower levels of education, less attachment to the labour force, lower incomes, and more requirement for social assistance, than did mothers who became lone parents through divorce. These differences between single and divorced lone-parent families also translated into differences with respect to the educational outcomes of their children.

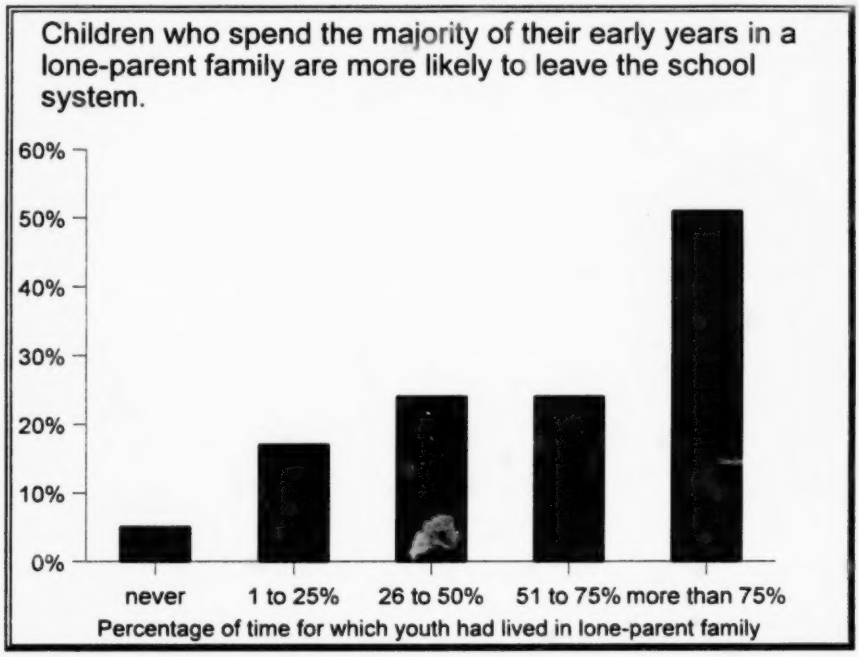
- 36 percent of 20-year-olds whose mothers were single when they were born,

- 19 percent of 20-year-olds whose mothers were married when they were born but later divorced,

- 5 percent of 20-year-olds whose mothers were married continuously left the school system before completing grade 12 (Appendix A, Table 4.5).

Children who were born into single-parent families also experienced continuing educational disadvantage at the university level (Appendix A, Tables 4.6 and 4.7). By the time they reached their early twenties, youth who had been born into a single-parent family had attained an average of 12.1 years of schooling, in comparison to 12.9 years of schooling for youth who had entered a lone-parent family through divorce, and 13.5 years of schooling for youth who had lived continuously in a two-parent family.[8]

Despite the fact that almost half of all children now live in a lone-parent family at some time (Dechman, 2000), the experience of lone parenting is usually a temporary state, with the vast majority of lone parents entering into marriage or common-law relationships. While any experience of living in a lone-parent family tends to decrease the odds of children making it through high school, the effects are most evident among a minority of families that experience lone parenting for relatively prolonged periods of time (Appendix A, Tables 4.8 to 4.10).



There are also effects of lone parenting on university level attendance, but they are less pronounced than the effects on early school leaving (Appendix B, Table 4).

Family Stability

As demonstrated in the initial report from the FMP, children born into single-parent families are more likely to experience changes in their family structure than are children born into two-parent families. Whereas the vast majority of single parents subsequently marry, only approximately 30 percent of married

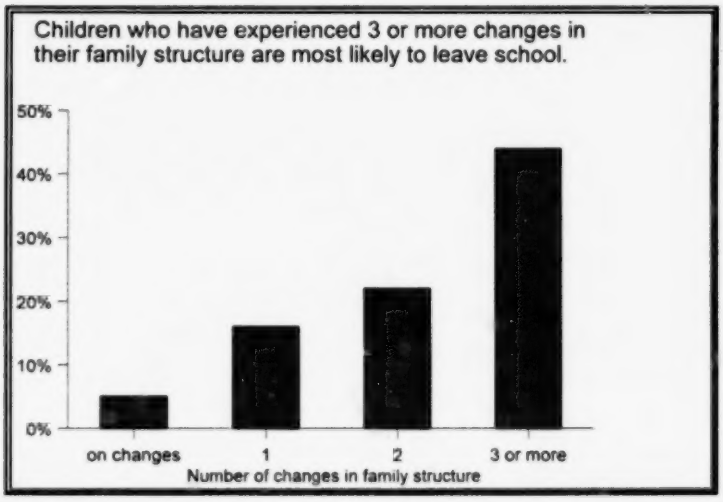
couples divorce. The primary question is whether the effects of lone parenting relate to having only one parent or alternatively are more closely link to the change children experience through moving from lone-parent, to two-parent, to blended families. Are the effects of lone parenting primarily a consequence of the instability associated with this type of family structure?

An index of dispersion has been created to monitor the relative stability of the child's family environment.[9] This index measures not only the total number of changes the youth experienced in his/her family structure but also the relative distribution of time across the various family types. For example, a child who had 3 changes before they were 3 years of age and then lived consistently in one family arrangement for the remainder of their 18 years would be considered to have a more stable family environment than another child who had a total of 4 changes in their family structure but spent approximately 4.5 years in each arrangement. The following table demonstrates how the index varies for different family experiences.

Description of Family History	Index Value
lived with both parents from birth to 18 years of age	1
lived with mother until 1 year of age and then with both parents for next 17 years	1.11
lived with both parents until age 4, lived with mother from age 5 to nine, then lived with mother and mother's partner from age 10 to 18.	2.5
lived with grandparents until 5 years of age, with mother from 6 to nine years of age, with mother and mother's partner from 10 to 15 years of age, with aunt and uncle for about 6 months, with mother and mother's partner for a year, with friends for about 6 months, with grandmother for a year	4.56

Youth who experienced the most unstable family structures were:

- more likely to leave the school system before completing grade 12 ($r = .35^{***}$),
- less likely to attend university ($r = -.23^{***}$),
- exhibited little difference with respect to technical or vocational training ($r = -.01$),
- had fewer years of schooling by the time they reach their twenties ($r = -.29^{***}$) (Appendix B, Table 4).

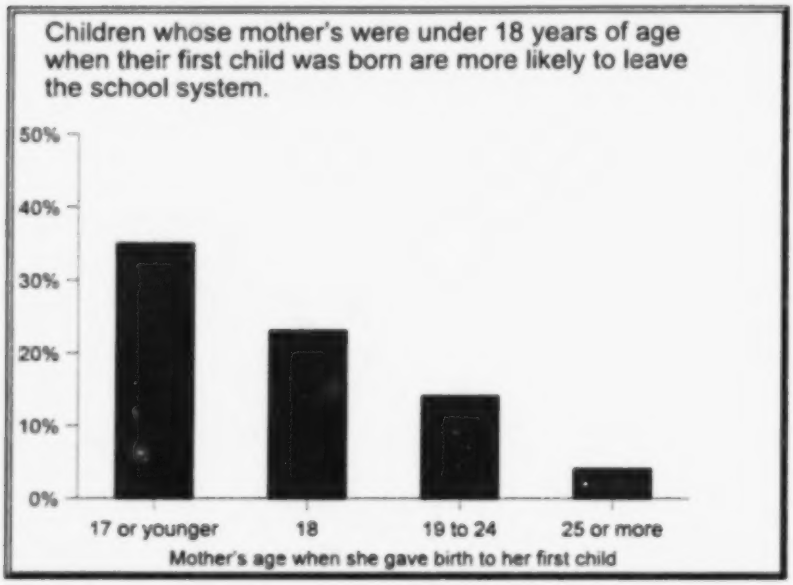


While even one change in family structure increases the odds of early school leaving, the effects of changes in family structure are most pronounced at the high end of the spectrum (Appendix A, Tables 5.1 through 5.3). Almost half of those youth who experienced 3 or more changes in their family structure left school before completing grade 12.

Mother's Age

When the FMP began in 1978, the ages of the mothers selected for the study ranged from 14 to 35. Other literature

has shown that effects of mother's age on the educational outcomes of their children relate particularly to starting child rearing prior to the age at which one would typically complete secondary school. As Seitz (1996: 269) points out, early child bearing would not be a problem if it did not involve reduced educational attainment and less ability for self sufficiency.


Children whose mother's were under 18 years of age when their first child was born are more likely to leave the school system.
50%
40%
30%
20%
10%
0%
17 or younger
18
19 to 24
25 or more
Mother's age when she gave birth to her first child

- Among women in the FMP who became mothers before 18 years of age, 38 percent of their sons/ daughters left the school system before completing grade 12.

- Among women who became mothers at age 18, 23 percent of their sons/daughters left the school system before completing grade 12.

- Among women who became mothers when they were 19 to 24 years of age, 14 percent of their sons/daughters left the school system before completing grade 12.

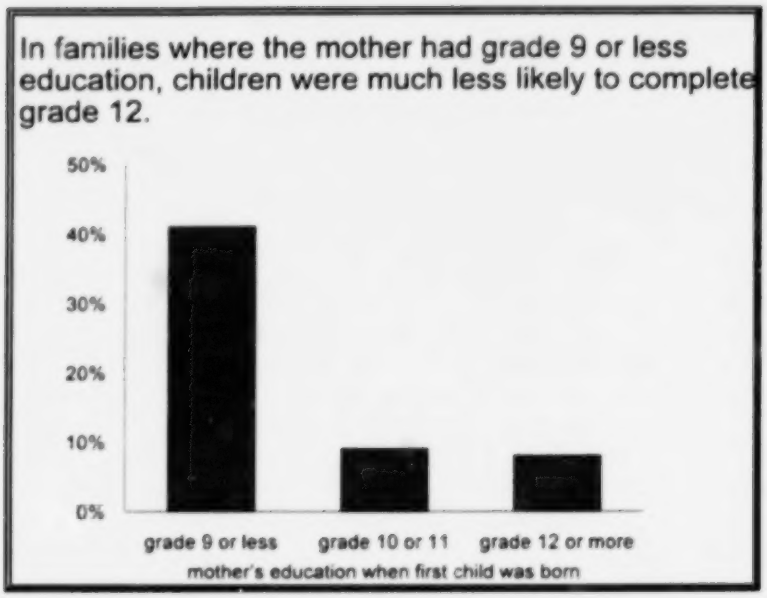
- Among women who became mothers when they were 25 years of age or older, 4 percent of their sons/daughters left the school system before completing grade 12 (Appendix A, Table 6.1).

Mother's age was also significantly associated with university attendance (Appendix A, Table 6.3), although not with technical or vocational training (Appendix A, Table 6.2). Table 4 in Appendix B shows correlations between the continuous variable of mother's age and various educational outcomes. In the final analysis, mother's age was significantly correlated with the total number of years of schooling completed by youth ($r = .33^{***}$).

Mother's Education

Mother's educational attainment has received a great deal of attention with respect to children's accomplishments in school. Bourdieu and Passerson (1990) maintain that children whose mothers have relatively high levels of education are better prepared and fit more easily into the system because their home environment provides a similar milieu and normative structure to that of the school. Studies have repeatedly shown that the mother's educational attainment is one of the strongest predictors of their children's educational attainment (Baer, 1999).

Earlier reports from the FMP demonstrated that mothers who had nothing more than a junior high certificate[10] were particularly disadvantaged with respect to long-term outcomes. These women were less likely to seek upgrading, had poor employment prospects, and were more likely to require public income assistance for extended periods of time. Children in such families were also much less likely to make it through secondary school.


In families where the mother had grade 9 or less education, children were much less likely to complete grade 12.
50%
40%
30%
20%
10%
0%
grade 9 or less
grade 10 or 11
grade 12 or more
mother's education when first child was born

- In families where the mother had grade 9 or less education at the time she gave birth to her first child, 41 percent of their sons/daughters left the school system before completing grade 12.

- In families where the mother had completed grade 10 or 11 at the time she gave birth to her first child, 9 percent of their sons/daughters left the school system before completing grade 12.

- In families where the mother had completed at least grade 12 at the time she gave birth to her first child, 8 percent of their sons/daughters left the school system before completing grade 12 (Appendix A, Table 7.1).

While the mother's educational attainment had little impact on the probability of taking vocational training (Appendix A, Table 7.2), university attendance was virtually unheard of in families where mothers had very low levels of education (Appendix A, Table 7.3).

- In families where the mother had Grade 9 or less education at the time she gave birth to her first child, only 7 percent of their sons/daughters ever attended university.

- In families where the mother had completed Grade 10 or 11 at the time she gave birth to her first child, 52 percent of their sons/daughters attended university.

- In families where the mother had completed at least Grade 12 at the time she gave birth to her first child, 72 percent of their children attended university.

By the time they reached their early twenties, youth whose mothers had started parenting with grade 9 or less education had achieved an average of 11.5 years of schooling in comparison to an average of 13.4 years of schooling among youth whose mothers had completed at least grade 10 before they were born ($t = 11.62^{***}$)[11].

Mother's Employment

Despite the extensive literature associated with Coleman's social capital model, there is less than overwhelming empirical support for the relevance of some aspects of this perspective. A number of reports indicate that mothers' employment either bears no relation, or is positively associated with, children's educational attainment (Muller, 1995). Results from the FMP do not show any significant association between the duration of mother's employment and early school leaving ($r = .03$), the probability of taking technical or vocational training ($r = .01$), or university attendance ($r = .06$) (Appendix B, Table 4). There is a slight positive correlation between the duration of the mother's employment and the total number of years of schooling completed by their children ($r = .11^{***}$) (Appendix B, Table 4).

In addition to considering total duration, mothers' employment patterns were also examined within three separate time periods: prior to the child starting school, between initial school age and 10 years, and over 10 years of age. Neither the mother's employment prior to school age nor the mother's employment when the child was between school age and 10 had any impact on educational outcomes. However, in households where the mother was not employed when the child was older than 10, youth were less likely to attend university (r = .11***) (Appendix B, Table 4). Attending university is a costly undertaking, the financing of which may be facilitated by the mother's earnings.

The basis of many of Coleman's (1987) arguments with respect to the negative consequences of mothers' employment relate to the belief that people are placing more priority on their jobs than on their children. However, mothers' opinions about the employment/family mix had no significant impact on children's educational outcomes (Appendix B, Table 4).[12] The child's educational attainment was unaffected by whether their mother maintained a traditional view of child rearing as a full time vocation or thought it was fine to combine family and employment responsibilities.

There was also no evidence of Coleman's (1987) contention that more positive outcomes accrue to children who are cared for by relatives when mothers are employed. Distinctions between family versus other child-care arrangements were not significantly associated with any measures of educational attainment (Appendix B, Table 4).

Whereas neither the duration of employment, the type of child-care arrangement, nor the mother's general opinions, tended to make much difference in the educational outcomes of children, particular characteristics of the mother's employment were somewhat influential. In households where

the mother was employed, part-time hours tended to be more conducive to positive educational outcomes among children than did full-time employment (Muller, 1995).

- In families where mothers were always employed full time, 20 percent of their children left the school system before completing grade 12 (Appendix A, Table 8.1).

- In families where mothers had been employed part time because of a lack of employment, 12 percent of their children left the school system before completing grade 12.

- In families where mothers had been employed part time by choice, 8 percent of their children left the school system before completing grade 12.

The frequent experience of strain between job and family demands also tended to have negative repercussions with respect to children's schooling.

In families where mothers said they never felt torn between job and family demands, only 2 percent of youth left the school system before completing grade 12. This percentage increased to:

- 7 percent for not very often

- 14 percent for sometimes

- 12 percent for usually, and

- 23 percent in those families where mothers said they always felt torn between job and family demands. (Appendix A, Table 8.4).

Poverty

Results of the FMP project mirror findings from many other studies demonstrating a significant association between poverty and educational outcomes (Appendix B, Table 4). The experience of poverty, and particularly extended poverty, is negatively correlated with educational outcomes for youth.

- 42 percent of the young adults whose family income was below the poverty line at both the time of the 10 and 20-year data collections left the school system at some time before completing Grade 12 (Appendix A, Table 9.1).[13]

- 19 percent of young adults whose family income was below the poverty line at either the 10 or 20-year data collections but not at both times, left the school system before completing Grade 12.

- 9 percent of young adults whose family income was not below the poverty line at either the 10 or 20-year data collections, left the school system before completing Grade 12.

Although poverty was not correlated with the probability that youth would take some type of technical or vocational training (Appendix A, Table 9.2), having lived in poverty at any time while growing up substantially reduced the chances of university attendance (Appendix A, Table 9.3).

- 19 percent of the young adults whose family income was below the poverty line at both the time of the 10 and 20-year data collections attended university.

- 47 percent of young adults whose family income was below the poverty line at either the 10 or 20-year data collections but not at both times, attended university.

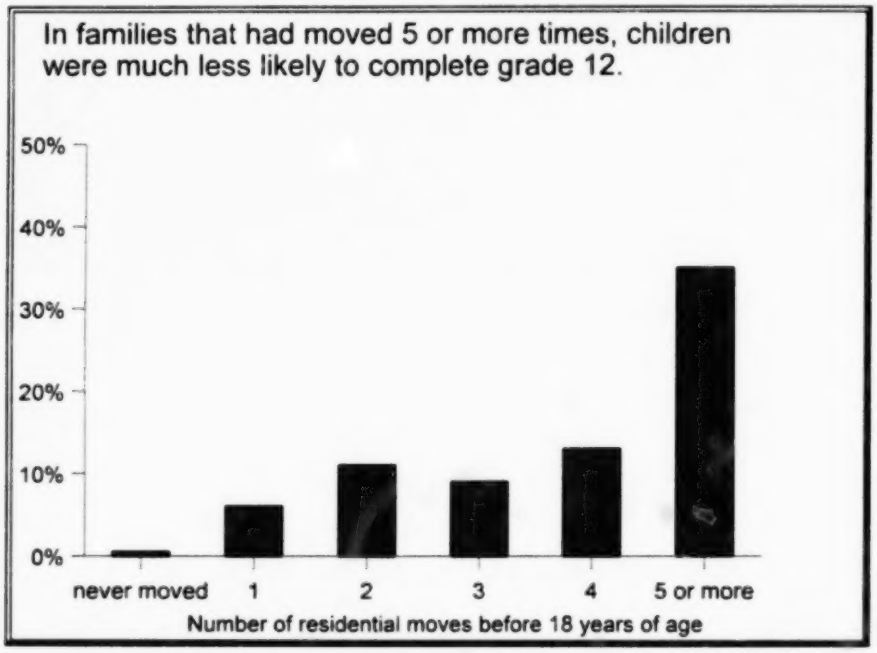
- 64 percent of young adults whose family income was not below the poverty line at either the 10 or 20-year data collections, attended university.

Once again, the final educational outcomes of youth are significantly affected by poverty, and particularly extended poverty. Youth who had experienced extended poverty had an average of 11.8 years of schooling, youth who had experienced more temporary poverty had an average of 13.0 years of schooling, youth who had never lived in poverty had an average of 13.4 years of schooling ($F = 37.93^{***}$).[14]

Residential Stability

Mothers were asked to describe their residential patterns at both the time of the 10 and 20-year data collections. While approximately 20 percent of families had remained in one location for the entire 20 years covered by the project, another 20 had relocated 5 or more times. Consistent with findings from other research (Haveman, Wolfe, and Spaulding, 1991; Astone, and McLanahan, 1994), the FMP showed that the frequency of residential relocation was negatively correlated with educational outcomes. Youth in families that moved frequently were more likely to leave school before completing grade 12 ($r = .33^{***}$), less likely to attend university ($r = -.20^{***}$)

and generally had completed fewer years of schooling by the time they reached their twenties (r = -.28***) (Appendix B, Table 4).



Consistent with other research (DeWit, Offord and Braun, 1998: 23), the effects of residential mobility were most evident at the high end of the spectrum (Appendix A, Table 10.1).

In the social capital model, such relocations are perceived as detrimental because of the breakdown of community social networks and social control. However, the frequency of moves is related to changes in family structure (r = .47***), poverty (r = .27***), and opinions about the quality of the accommodations in which the family was living (r = -.55***). Contrary to Coleman's portrayal of children being adversely affected because they are removed from positive community networks, the most mobile families typically lived in unsatisfactory situations in the first instance. Highly mobile families move frequently because they are poor and unable to pay their rent, have separated or divorced, and/or find their existing housing unacceptable. In many instances it is unfavourable family and community circumstances that cause high mobility rather than high mobility that causes a loss of positive relationships.

Adequacy of Living Accommodations

During the 10 and 20-year interviews for the FMP, mothers were asked how acceptable they had found their living accommodations during the prior years. In families where mothers indicated they had experienced unacceptable living accommodations at some time, young people were less likely to make it through grade 12 (Appendix A, Table 11.1).

- 34 percent of youth whose mothers had lived in accommodations they had found unacceptable, as compared to

- 9 percent of youth whose mother had never lived in accommodations they had found unacceptable, left school before completing grade 12.

Mothers and youth talked about crime, violence, and the stigma of living in low-rental areas.

- "Growing up was rough, especially in my neighbourhood. My vice principal was the only one besides my mom who believed in me."
- "It's public housing - you're stereotyped. The tenants lack self esteem."

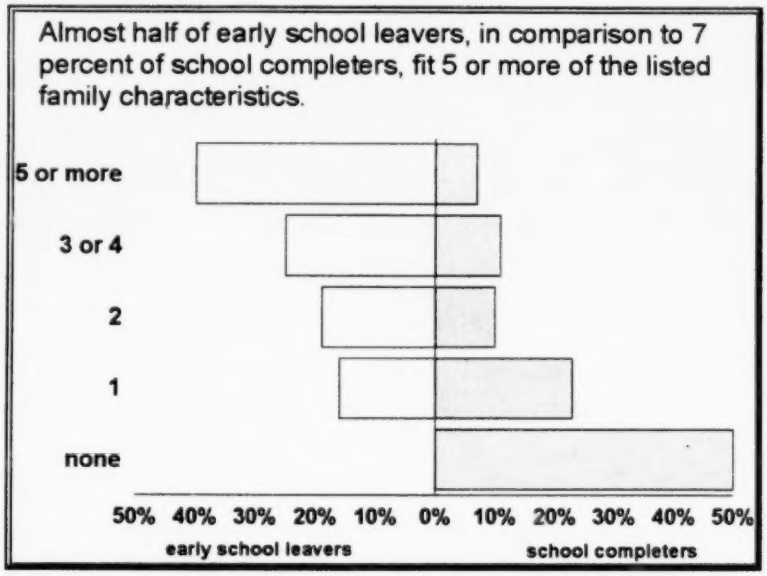
The experience of adverse living conditions also was negatively correlated with the pursuit of post-secondary endeavours (Appendix A, Tables 11.2 and 11.3).

Most Influential Structural Factors

Not only do early school leavers have distinctly different experiences at school but they also tend to have different family characteristics than do those who complete grade 12.

	early school leavers	school completers
2 or more changes in family structure	57%	18%
spent at least half of life in lone-parent family	51%	18%
moved 5 or more times	56%	16%
lived in poverty at some time	46%	22%
mother required social assistance at some time	54%	17%
had unacceptable place to live	42%	12%
mother 18 years of age or younger when child was born	29%	9%
mother had grade 9 or less education when child was born	37%	7%

As mentioned in the introduction, there are many overlapping features of family life, with those households that are disadvantaged in one area, such as mother's educational attainment, also being more likely to be disadvantaged in other areas, such as the experience of poverty, unacceptable living accommodations, family instability, and residential mobility. Appendix A, Table 12.1 shows the inter-correlations amongst the continuous variables reflecting family structure. The consequence of these overlapping characteristics is that the majority of early school leavers fit not just one but two or more of the above characteristics. The summation across all of the characteristics listed above shows that the lives of early school leavers represent a mirror image of the lives of those youth who make it through grade 12 without interruption.


Almost half of early school leavers, in comparison to 7 percent of school completers, fit 5 or more of the listed family characteristics.
5 or more
3 or 4
2
1
none
50% 40% 30% 20% 10% 0% 10% 20% 30% 40% 50%
early school leavers
school completers

- Forty percent of early school leavers fit at least 5 of the family characteristics listed in the above table whereas only 7 percent of those who had no interruption in their schooling fit this profile.

- Conversely, half of those with no interruptions in their schooling had experienced none of the challenges outlined in the above table in comparison to less than 1 percent of early school leavers.

Family Dynamics

While the preceding section focused on tangible structural aspects of the family, this section delves more fully into the less tangible relationships amongst family members and with the larger community. Particular attention will be paid to the areas of social capital, cultural capital, and social exclusion.

Support for Child Rearing

There has been a long tradition stressing the importance of social support in facilitating positive family functioning (Ryan and Adams, 1998). Coleman's social capital arguments are based on the view that

successful child rearing requires two parents and a network of extended family and community contacts (1987). Others, however, would argue that while social support is important for child rearing, there are many different forms such support can take, both from within and outside family networks (Eichler, 1988; Eichler, 1997; Wylie, 1997). The initial report from the FMP indicated that mothers in one-parent families tended to draw on more diverse social-support networks than did mothers from two-parent families. Mothers in two-parent families relied most heavily on support from their husband or partner whereas mothers in one-parent families tended to have more support from extended family, professionals, and community organizations.

During the time of the 10-year data collection for the FMP, mothers were asked who was helping them care for their son/daughter. In those families where the mother indicated she was the sole caregiver for the child at 10 years of age, there were long-term repercussions with respect to the probability of early school leaving (Appendix B, Table 5).

At the time of the 20-year data collection, mothers were asked to provide a more general perception of the extent to which they had taken primary responsibility or someone else had shared various aspects of child rearing over the years. The list of child-rearing responsibilities included: taking their son or daughter to the doctor, taking care of their son/daughter when he/she was ill, taking their son/daughter to special events, taking their son/daughter to practices, games, or lessons, setting rules, helping with school work, and working through problems. In families where child-rearing responsibilities were more equally shared, children were more likely to complete school and more likely to attend university (Appendix B, Table 5). There was a particularly high probability of early school leaving in families where mothers indicated they had taken primary responsibility for all aspects of child rearing (Appendix B, Table 5).

The Mother/Child Relationship

There are ongoing discussions pertaining to the relative importance of certain parenting styles versus socio-economic factors in promoting positive outcomes for children (Gorard, 2000). A factor analysis of information collected at the time of the 10-year interview for the FMP yielded five principle components of mother-child relationships. Each component included items measured on a 5-point scale including never (1), seldom (2), half the time (3), frequently (4), and always (5).

Praise:

- I praise [NAME] when [he/she] is good
- I make sure [NAME] knows that I appreciate what [he/she] tries and accomplishes
- When [NAME] does something well I let [him/her] know I am proud of [him/her][15]

Quality time:

- [NAME] and I have, warm, friendly times together
- I feel [NAME] is a bit of a disappointment to me
- There is a good deal of conflict between [NAME] and me
- [NAME] and I aren't as happy with each other as we might be
- I am easy going and relaxed with [NAME][16]

Strict application of rules:

- If I make a rule for [NAME], I stick to it
- I threaten punishment and don't give it
- If I say I am going to punish [NAME] for something, I carry through
- I let myself get talked out of things
- I forget rules that have been made[17]

Mother's negative assessment of child:

- I tell [NAME] I worry about how [he/she] will turn out because of [his/her] bad behaviour
- I keep reminding [him/her] of past bad behaviour
- I let [him/her] know that if [he/she] really cared [he/she] wouldn't do things to cause me worry
- I let [him/her] know all I have done for [him/her] when I want [him/her] to obey[18]

Physical punishment:

- physical punishment is the best way of disciplining [NAME]
- the most effective punishment is to give [NAME] a spanking

- When [NAME] does something wrong [he/she] gets a slap or spanking[19]

Only one of these five scales exhibited a significant linear relation with early school leaving.[20] In families where mothers expressed concern about how their child would turn out, youth were more likely to drop out of school (r = .15***), less likely to attend university (r = -.11***), and ended with lower total years of schooling (r = -.12***) (Appendix B, Table 5).

With respect to the consistent application of rules, there appears to be a threshold above which the effects on school outcomes reverse.[21]

- 16 percent of those who had low scores,

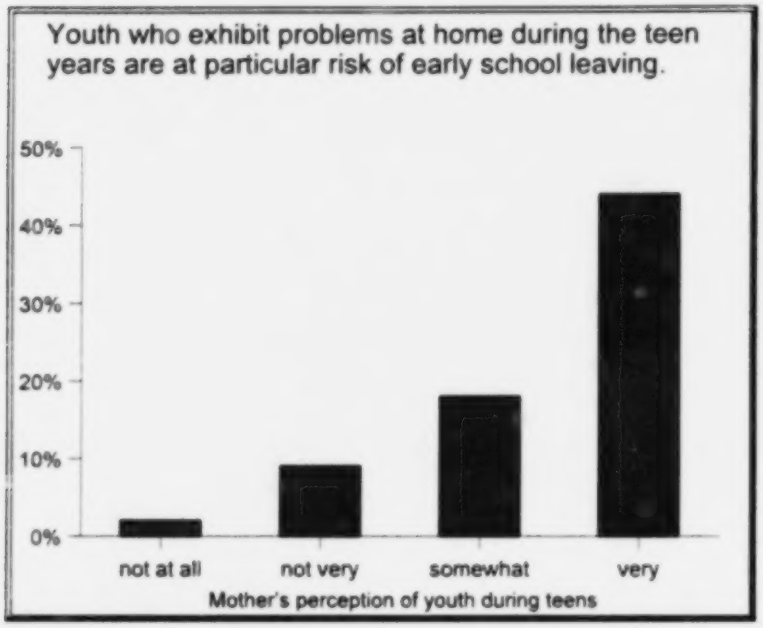
- 4 percent of those who had mid range scores, and

- 13 percent of those who high scores on the consistent application of rules index left the school system before completing grade 12 (Appendix A, Tables 13.1 - 13.3).

The real world is so complex it may not be possible to follow any exact formula. While it is important to provide children with an understanding of expectations and the consequences of inappropriate behaviour, it is also important to introduce some latitude for moderation. Neither the complete absence of rules nor the complete adherence to unbending rules appears to be the optimum approach.

The three scales of praise, quality time, and physical punishment were skewed with means of 4.7, 4.2, and 1.5, respectively, and did not exhibit any consistent association with educational outcomes (Appendix B, Table 5).

Like teachers, mothers also completed Achenbach Checklists on their child's behaviour at 10 years of age. Similar to the findings related to teachers' assessments, mothers' ratings of hyperactivity and aggressiveness were particularly influential as predictors of early school leaving among girls (Appendix B, Table 5).



The association between mother-child conflicts and educational outcomes becomes more pronounced during the teen years. In families where the mother said she had a very difficult time with her son/daughter during the teen years, approximately half left the school system before completing grade 12 (Appendix A, Tables 13.4 to 13.6).

There appears to be a cycling back and forth between problems at home and problems at school. Both the mother's assessments of the child's behaviour and the teacher's assessments of the child's behaviour at 10 years of age exerted independent effects on the mother's rating of difficulties during the teen years.[22] The cumulative effect of both the mother's and the teacher's 10-year ratings were significantly correlated with the probability that the youth would leave the school system before completing grade 12 ($r = .31^{***}$).

In addition to structured questions, interviewers for the FMP were asked to record comments made by respondents about particular problems they had experienced. There were discussions of physical violence, sexual assault, conflicts with the law, death or suicide of a close friend or family member, excessive drug or alcohol use, and prolonged mental health problems. It was not possible to make direct comparisons across groups because respondents were not explicitly asked about such problems. However, instances of such significant difficulties were voluntarily discussed in the course of over half the interviews with youth who had left school before completing grade 12. While this should not be used as a definitive quantitative measure, it is a conservative estimate of the proportion of early school leavers who are likely to have confronted major challenges in their lives.

In some cases, difficulties culminated in early departure from the parental home which had pronounced repercussions for the probability of completing school. Fifty-eight percent of those who left home before 18 years of age, in comparison to 9 percent of those who remained in their parental home, dropped out of school before completing grade 12 (Appendix A, Tables 13.7 through 13.9).

Support with School Work

The FMP included two measures of assistance with homework. At the time of the 10-year data collection, mothers were asked how many hours a week someone spent helping the child with their homework. At the time of the 20-year data collection, the young adults were asked to recollect the extent to which their mother, father, and/or other family members had helped them with their homework during their school years.

In households where family members spent the highest amount of time helping with homework at 10 years of age, the young person was more likely to drop out of school (Appendix B, Table 5). This unexpected finding becomes more understandable when one examines the relationship between school performance and the intensity of family support for homework. Generally speaking, children who were performing poorly in school received more help with their homework than did children who were performing well in school (r =-.28***). When school performance ratings were controlled, the negative association between time spent on homework and early school leaving dissolved (Appendix A, Table 14.1).

The more general measure of assistance with homework throughout the duration of the youth's schooling [23] was not significantly correlated with early school leaving (Appendix B, Table 5). Overall, it appears that the causal direction tends to run more from school performance influencing the amount of time spent helping with homework than the other way around. This finding is consistent with Gorard's (2000: 182) work that emphasizes the impacts of socio-economic status over issues of helping with homework and teaching styles.

Relationship Between Home and School

Furthering the argument that parents needed to take an active interest in their children's schooling, those following the social capital model promoted increased parental involvement in children's schooling. The FMP project included a series of questions related to the mother's contact with teachers and her general involvement in school activities at the elementary, middle, and high school levels. Both contact and general involvement steadily decreased as the child progressed into higher grades (Appendix A, Tables 15.1 and 15.2).

- During elementary school, 86 percent of mothers said they often attended school activities and 59 percent said they frequently had contact with teachers.

- During middle school, 60 percent of mothers said they often attended school activities and 32 percent said they frequently had contact with teachers.

- During high school, 45 percent of mothers said they often attended school activities and 20 percent said they frequently had contact with teachers.

> "In elementary school the teachers took an interest. If she was ill they would send home work and ask how she was doing. It seemed harder to communicate with the teachers when she was in high school. Seemed that the teachers had so many students that you didn't get one-on-one."

The composite index including both contact and involvement was correlated with early school leaving. In families where mothers reported persistent contact and involvement, youth were more likely to make it through grade 12 ($r = -.10^{***}$)[24] (Appendix B, Table 5).

While the social capital perspective stresses the degree of contact between parents and school staff, the social exclusion perspective focuses more specifically on the quality of parent - child - school relationships. The promotion of increased parental involvement at the school level has sometimes served to further alienate, rather than help, those families whose children are at greatest risk of dropping out (McGrath, and Kuriloff, 1999; Standing, 1999).

In addition to asking about amount of contact, mothers were also questioned about how comfortable they felt discussing their concerns with teachers. Like

the contact issue, there was a steady decline in the comfort level of mothers as their children moved into higher grades (Appendix A, Table 15.3). This measure of 'comfort' was also correlated with early school leaving (r = -.17***) (Appendix B, Table 5).

Mothers who had low levels of education themselves tended to have particular problems communicating with teachers.

- "I was intimidated by the school system. I had him at age 17."
- "I feel there should be more one-on-one contact (between parents and teachers) but they intimidate me. If teachers didn't charge at you, it would be nice."
- One of the FMP project respondents who was a teacher as well as a mother said: "It is important not to use language that excludes people outside the school system."
- "It would help both sides (parents and teachers) to meet eye-to-eye to see where each other is coming from."
- "They should communicate when things are good, not only when things are bad."

In a similar vein, the mother's perception of justice is a significant indicator of the probability that the young person will make it through school. In the vast majority of cases (87 percent), mothers indicated their child had usually been treated fairly by the school system. However, early school leaving was much more prevalent within the small group who said their child had sometimes or often been unfairly treated (Appendix A, Tables 15.4 to 15.6).

- In families where the mother said the young person had usually been treated fairly by the schools 90 percent of children completed grade 12.

- In families where the mother said the young person had sometimes or often been treated unfairly, 58 percent of children completed grade 12.

It was not unusual for mothers to say they had had a particularly difficult time with the school at some point concerning their child, approximately one in three (36 percent).

- In families where mothers said they had encountered a particular difficulty with the school, 17 percent of their sons/daughters left school before completing grade 12.

- In families where mothers said they had never encountered a particular difficulty with the school, 10 percent of their sons/daughters left school before completing grade 12 (Appendix A, Tables 15.7 to 15.9).

While it is not surprising that there is an association between encountering problems with the school system and early school leaving, one might expect this association to be more pronounced. The effects of difficulties on early school leaving appear to be mediated by the relationship between the mother and the school. Even when problems arise, they are unlikely to have a negative bearing on the youth continuing in school unless the mother feels uncomfortable discussing her concerns with the school or feels her son/daughter has been unfairly treated. If the mother felt comfortable with the school and felt her child was usually fairly treated, the young person was twice as likely to make it through grade 12 without dropping out, despite having encountered a problem (Appendix A, Tables 15.10 and 15.11).

Many young people experience difficulties at some point. It is important to maintain positive lines of communication between the school and the home to help resolve difficulties when they arise. Relationships between parents and

the school can make the difference between whether a young person will stay or drop out.

Some mothers describe situations where relations between the school, child, and home followed a long-term process of continuing deterioration rather than problem resolution.

- "Stop labeling kids! Once you label "learning problem" it never goes away. Schools have to realize that they may know the system but parents know the child."
- "One teacher diagnosed my child. She thought it was a discipline problem but it was a hearing loss problem. Fifty percent hearing loss. This study is long overdue. I hope for changes."
- "They are good at diagnosing problems but have no practical programs to help them."
- "Kindergarten teacher didn't like him. That set the tone. He hated school ever after."
- "They couldn't cope with his ADD and didn't have training in dealing with it."
- "In high school it was all negative. They didn't even tell you any positive stuff. Why would you want to go hear negative stuff all the time. Eventually, I wouldn't even bother."

Mother's Opinions About Schooling

Coleman's (1988) notion of parenting deficit is most fully articulated in discussions of parents' lack of interest or involvement in their children's educational endeavours (Rosenthal, 1998: 419). In an open question format, mothers in the FMP were asked what they stressed as most important to their children. Contrary to popular belief, mothers with low levels of education were somewhat more likely than higher educated mothers to say they stressed the

importance of education (r = -.17***).[25] Having experienced the restrictive consequences of low educational attainment, these mothers often saw education as the means for their children to have a better life than they themselves had had.[26]

Mothers with higher levels of education tended to focus more on personal fulfillment, probably because they took educational accomplishment for granted. Unfortunately, stressing the importance of education cannot overcome other social and economic deficits. Appendix A, Table 16.1 demonstrates that the mother's emphasis on educational attainment has little direct effect on educational outcomes.

Following the cultural capital arguments of Bourdieu and Passerson (1990), one would expect educational outcomes to be influenced not so much by the mother's valuing of education but rather by the extent to which her views on the educational process were in sync with school norms.

A multidimensional index of mothers' attitudes toward learning and education was formed using ratings on the following contrasting statements.[27]

the schools should focus most on the basics of reading, writing, and arithmetic	the schools should focus most on developing children's creativity
the most important thing for schools to do is help students develop practical skills	the most important thing for schools to do is help students develop general knowledge about many different things
education should be designed to help people get jobs	education should be designed to expose students to different ideas

you mostly stick to things that are similar to something you have done before	you often take on new projects and challenges
you don't have much chance to learn new things	you often learn new things
you like to have a job you can do well because you have done it before	you like to have a job where you can do new and different things

Ratings on this index were not significantly correlated with early school leaving (r = -.02) or the attendance of technical or vocational programs (r = -.02). However, there was a weak association between this measure and university attendance (r = .11***) (Appendix B, Table 5).

Extracurricular Activities

Both the social-capital and social-exclusion perspectives stress the importance of involvement in community groups and organizations. From the social-capital perspective, these groups represent networks beyond the immediate family that may prove instrumental for both social control and contacts. From the social-exclusion perspective, such activities provide a connectedness to the larger society and a venue for positive relationships and self evaluations.

The FMP included a number of questions assessing involvement in various extracurricular activities both inside and outside the school context. Those youth who participated in extracurricular activities at school were less likely to leave the school system before completing grade 12 (Appendix A, Table 17.1).

- Only 8 percent of youth who said they often participated in extracurricular activities offered by the school left the school system before completing grade 12.

- 11 percent of those who sometimes participated,

- 17 percent of those who seldom participated, and

- 24 percent of those who never participated in extracurricular activities, left school at some time before completing grade 12.[28]

Because such extracurricular activities are particularly important to struggling students, it is important that all children have an opportunity to participate.

- "She was always there for me - my soccer coach. She cared about everyone on the team. She was always there for me and tried to steer me in the right direction."

- "Gym teachers gave me a push. I didn't have a high interest in school and they encouraged me to study. Other school, the teachers didn't care and would let you slip."

- "Basketball coach. She always made you feel that you could pick up, even if you weren't doing well at the moment."

Some mothers of students who were struggling academically described the importance of their child's involvement in extracurricular activities offered by the school.

- "Some clubs she went to helped a lot. She became friends with the people in the club and the teachers."

- "School programs are great for building self esteem. Intermurals at school kept him off the streets."

Rather than accomplishing the desired effect of encouraging students to concentrate on their studies, removal from extracurricular activities sometimes pushes the young person out of the school system.

- "They took him off the teams because his marks weren't good and that was the last straw."

- One mother described the difficulties she had had trying to collect her son's assignments from the school when he was off sick for an extended period of time. "When the exams came a few weeks later he failed chemistry by 4 points. He couldn't do sports the next year because it is the school policy if you fail a year. He loves sports."

In addition to questions pertaining to involvement in school-based extracurricular activities, young people were also asked about their general activities outside of school hours. A factor analysis of these non-school-related activities produced two primary factors:

Involvement in community groups/volunteer activities during teens:

- be a leader for any group or club such as Girl Guides, Scouts, Sunday School

- belong to any group or club for which you were not a leader

- do other volunteer activities.[29]

General socializing with friends during teens:

- go to sports games, movies, theatre, musical or other performance, or events

- go to dances or parties

- just hang around and talk with a friend or friends.[30]

While general socializing had little impact on early school leaving in either a positive or negative direction, involvement in community groups and volunteer activities was associated with making it through grade 12 (Appendix B, Table 5). Many mothers commented on the importance on their child's involvement in community activities.

- "The 4-H Club and community youth group gave her social skills and the ability to get along and see differences in people."

- "She felt she belonged to a group on the swim team. There was a sense of community. The peer group was very beneficial."

- "Youth leaders talked about my son's strengths and helped me to work on these."

Not only the young person's, but also the mother's, involvement in community and volunteer activities was positively correlated with educational outcomes.

- In families where the mother was involved in community activities at both the time of the 10 and 20-year data collections, 8 percent of their children left school before completing grade 12.

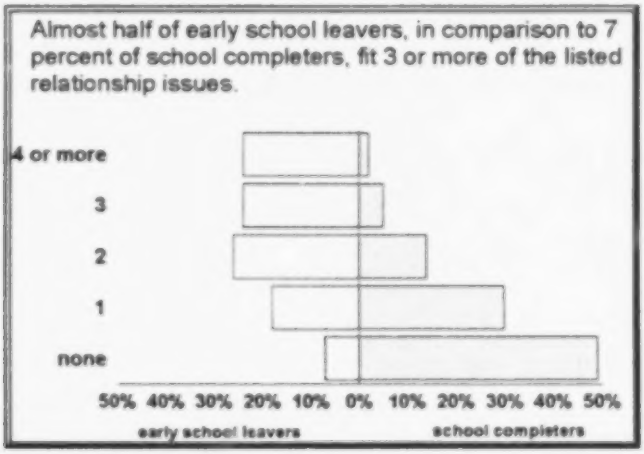
- In families where the mother was involved in community activities at either the 10 or 20-year data collections but not at both times, 16 percent of their children left school before completing grade 12.

- In families where the mother was not involved in community activities at either the 10 or 20-year data collection, 26 percent of their children left school before completing grade 12. (Appendix A, Table 17.2)

Family and Community Relationships

Youth who leave the school system before completing grade 12 tend to be drawn from families that have less access to support either internally or in the larger community.

	early school leavers	school completers
little support for child rearing	31%	13%
mother considered youth a very difficult teen	67%	22%
youth left parental home before age 18	32%	3%
mother did not feel comfortable discussing issues with school	27%	14%
mother did not feel her son/daughter was treated fairly by school	24%	5%
mother was not involved in community activities	16%	7%
youth was not involved in community activities	25%	14%
youth was not involved in extracurricular activities at school	16%	7%


Almost half of early school leavers, in comparison to 7 percent of school completers, fit 3 or more of the listed relationship issues.
4 or more
3
2
1
none
50% 40% 30% 20% 10% 0% 10% 20% 30% 40% 50%
early school leavers
school completers

Unfortunately, those children who most need help because they are struggling in the school system tend to come from families who themselves have the fewest sources of support upon which to draw.

In the final analysis, the process of early school leaving is influenced by characteristics of the child and evolving conditions of the home and school environments. While cognitive and behavioural attributes of the child form the foundation for educational achievement, structural factors and relationships are critical in mediating the effects of these attributes on long-term outcomes. There are no foregone conclusions. What is most important is for families, schools, and the larger community to work together to support each unique child in living up to their full potential.

Summary of Key Points

Early school leaving tends to result from a series of events that begin before the child enters the school system. There is unlikely to be a 'single cause' for any particular individual and certainly not one cause that can be addressed as the definitive answer to improving educational outcomes for all youth.

While cognitive ability is an issue for some early school leavers, the majority of young people who leave the school system before completing grade 12 score in the average or above IQ range.

The home environments of early school leavers tend to be distinctly different from the home environments of youth who complete grade 12. Youth who leave the school system before completing grade 12 are more likely to have:

- mother with grade 9 or less education when first child was born
- mother who was under 19 when child was born
- lived in unacceptable accommodations at some time
- moved 5 or more times
- lived in poverty at some time
- required social assistance at some time
- experienced at least 2 or more changes in their family, for example, divorce, remarriage

- lived in lone-parent family for at least half of their life.

Virtually all early school leavers fit at least one and approximately half fit 5 or more of these characteristics.

Not only are early school leavers typically drawn from less stable more economically disadvantaged households, but their families tend to have less well developed support networks both internally and within the larger community. The homes of early school leavers were more likely to have:

- mother reporting little or no support for child rearing
- mother not involved in community activities
- mother believing son/daughter was not fairly treated by school
- mother not feeling comfortable discussing concerns with teachers
- youth not involved in extracurricular activities at school
- youth not involved in community activities
- mother considering youth to be a difficult teen
- youth leaving home before 18 years of age.

Once again, it is not that the homes of all early school leavers fit all of these characteristics but rather that their homes are more likely to fit these characteristics than are the homes of those who successfully complete grade

12. What is more important to consider is that almost all early school leavers fit at least one of these characteristics and approximately half fit 3 or more.

While problems at school are linked to difficulties in the families of many early school leavers, this does not mean the young person's experiences in the school system are inconsequential. Poor behavioural assessments by teachers and grade retention are often early indicators of difficulties. Conversely, youth who feel safe and secure in the school environment, who perceive teachers to be fair and who feel teachers hold positive expectations for them are more likely to make it through grade 12. Youth who leave school before completing grade 12 are more likely to:

- have elementary teacher indicate their behaviour was inappropriate
- have below average performance rating in elementary
- repeat one or more grades
- feel teachers are not encouraging
- perceive teachers as not dealing with students fairly
- not feel free to express their opinions in class
- be uncomfortable asking questions if they do not understand something
- believe teachers think they will not do well in life
- sometimes not feel safe at school.

Once again, not all early school leavers fit all of these characteristics. Rather, such conditions are indicative of a disengagement process that, while it takes different forms for different students, is definitely more prevalent among those who leave than those who remain in the school system.

Discussion

Results from the FMP indicate that there are many different conditions that can lead to slippage in the school system. Some children experience cognitive difficulties grasping the course material, others behave in ways that precipitate conflict in the classroom, and still others are distracted or inattentive.

Unfortunately, those children who experience problems in the classroom often have families that are the least well equipped to support them through such problems because they themselves are often undergoing considerable strain. Early school leaving is most prevalent in families where the mother has grade 9 or less education, there have been changes in the family structure, the family lived in poverty for extended periods of time, they experienced unacceptable accommodations, and moved a number of times. What this means is that solutions to troubles at school such as relying more heavily on parental support may further disadvantage those youth who are already the most vulnerable. Parents with low levels of education typically can neither assist with homework nor afford to pay for a tutor.

There are no strict determinants of positive or negative outcomes for children. In any of the aforementioned categories, at least half of the children have made it through grade 12. For example, half of the children whose mothers had grade 9 or less left before completing grade 12, the other half made it through. While not completely deterministic, one need only compare the 59 percent success rate of children whose mothers had grade 9 or less with the 91 percent success rate of children whose mothers had higher levels of education to realize that characteristics of the home environment certainly affect the odds of success in school.

An examination of the lives of school leavers makes it eminently evident that it would be naive to expect that external circumstances could fail to influence their school achievement. The primary question for parents and school personnel is how can we improve the chances that youth will make it though school, regardless of the specific origin of their challenges?

Whether parents, teachers, or principals, the most important consideration to keep in mind is that "we bring out in children what we see in them". There is no substitute for acceptance and inclusion in the home and at school. When parents continually remind children of past bad behaviour, tell the child they worry about how they are going to turn out, or generally feel the young person is a "problem", such negative perceptions are likely to detract from success at school. The corollary to this in the school system is that teachers' assessments of the child as being inattentive or behaving inappropriately and youths' perceptions of teachers as being unsupportive and having low expectations for them also detract from the probability of reaching successful outcomes.

Enhancing the odds of youth making it through secondary school also extends past the family and school, into the community. Young people often refer to their experiences in extracurricular activities as important sources of self esteem and those involved in groups or activities such as sports teams, Girl Guides, Scouts, or 4-H, are more likely to make it though grade 12. Whether coaches at school or volunteer community leaders, adults other than teachers and parents can serve important mentoring and support functions, particularly for young people who may be struggling in the classroom.

One of the most pronounced findings from the FMP is that while cognitive difficulties may underlie early school leaving in approximately 1 out of 4 instances, any effort to improve educational outcomes must also consider

social and behavioural issues that are closely linked to the maintenance of positive relationships. Whether the young person begins to experience problems at school because he/she is having difficulty grasping the course material, is experiencing turmoil or conflict at home, or is exhibiting behavioural problems, the approach taken with such problems has important implications for final outcomes.

The debate over grade retention provides a useful example of the importance of addressing social as well as academic considerations. One of the primary challenges confronted by the school system is facilitating both high standards and high completion rates. Those who support retaining children who are struggling with the course material in the same grade for two or more years argue that to have them proceed would mean either lowering standards or setting the child up for failure in the next grade. Those who oppose grade retention argue that keeping a child back in the school system has such detrimental consequences for their self confidence that it does more to harm than to improve their chances of eventually making it through. Is this really a zero sum situation? Must we sacrifice either standards or the child's self esteem?

From the perspective of standards, the objective is to have the maximum number of young people making it through the school system with the greatest acquisition of knowledge. While 1 in 4 early school leavers may not achieve maximum knowledge acquisition because of cognitive restrictions, the other three-quarters of early school leavers have typically encountered social and/or economic difficulties that have detracted from their ability to live up to their full potential. Regardless of whether the child falls behind because of cognitive, social, or behavioural difficulties, once these difficulties occur the current system faces two equally problematic courses of action: have the child repeat a grade with the associated loss of confidence in their ability to

learn or let them proceed to the next grade intensifying their disadvantage because they are already behind. Given real world variations in cognitive abilities, physical and mental health, and family resources such as parental income and educational attainment, is it reasonable to expect all children in the same age group to proceed through course material at the same rate? If some young people are experiencing more challenges because they and/or their families are stressed by poverty, health problems, violence, or grief, does the retention of strict age-based standards not compound such disadvantage? In the long run, does it really matter whether a young person receives their grade 12 when they are 17, 18, or 19? If it does not really matter if some young people complete the grade 12 curriculum a few months after other young people and this added few months would provide the slack necessary to more adequately accommodate other difficulties they are experiencing, would it not be most advantageous in the long run to build such slack into the system. This type of approach would require shifting emphasis from a group-based to an individual progress model. An individual-based progress model would encourage children, parents, teachers, and schools alike to focus on each student's progress and mastery rather than counterproductive group comparisons. Such a system could overcome the stigma and negative effects of grade retention while at the same time supporting each student to live up to their full potential.

Not all children come to school with the same package of assets, consequently expecting them to all achieve at the same rate is unrealistic. The more rigid the demand for strict standards the more strain is placed on relationships among children, parents, and teachers, with each blaming the other for failure. Such negative communication patterns then exacerbate rather than diminish existing difficulties. Assessing and rewarding achievement based on individual progress rather than by comparison to arbitrary benchmarks has the potential to shift goals and communication

patterns toward a more positive focus on problem solving and progress rather than blaming and failure.

The grade retention issue is only one component of the larger picture of the shifting of priorities required to improve school outcomes. Another example relates to extracurricular activities. The policy of removing youth from sports teams if they are not performing well in their academic studies may well have the opposite of the desired effect. In some cases, coaches and group leaders provide the last link to positive reinforcement and, if this link is broken, the struggling youth is more likely to give up than to work harder.

In the final analysis, instruction is only one component of the educational process. Enhancing secondary school completion rates depends on the cooperative efforts of parents, teachers, coaches, and community leaders. To be successful, educational reforms must be examined not only on the basis of what might appear to be technical improvements, but also with respect to the implications of such reforms for facilitating rather than undermining a spirit of cooperation across families, schools, and the larger community.

Notes

1. This number excludes 26 of the original mother-child dyads because: the mother died, the child died, the child was adopted or the child was made a ward of the court before the time of the 10-year data collection.

2. For the purposes of this report, early school leaving refers to the 20-year old's reporting of having left the school system at some time before completing grade 12. Two questions were used to develop this measure. The first asked "Later on we will be asking about any university, technical, vocational, GED, upgrading or other adult education you may have taken, but could you first tell me what was the highest grade you completed before going on to any other type of education; for example, grade 7, 8, 9, 10, 11, or 12." Those who responded that they had completed grade 12 were then asked a subsequent question "Did you ever drop out of school at any time before completing grade 12". If the respondent answered less than grade 12 to the first question or responded 'yes' to the second question, they were considered to have left the school system at some time before completing grade 12.

   Whether or not the young person had completed grade 12, they were also asked if they had ever taken any technical, vocational, or university training. Both technical and university training are coded as dummy variables with 1 meaning that the young person had taken some technical/vocational or university training.

   The total years of schooling refers to the number of years of secondary training plus the number of years of technical, vocational, and/or university training. The number of years of secondary training refers to completed grade level not the repetition of grades.

3. This is consistent with information from the national Youth in Transition Survey (Bowlby and McMullen, 2002: 42).

4. Levene's test for equality of variances was not significant at .05.

5. Each of these items is measured on a 5-point scale. The Chronbach's Alpha for this index is .60.

6. McNeal (1997 also indicated that safety was an issue among early school leavers.

7. Levene's test for equality of variances demonstrated that the homogeneity of variance assumption was not upheld. The standard deviation within the continuously two-parent group was .93, in comparison to a standard deviation of 1.45 for the lone-parent group. Thus, the t-test used is not based on the homogeneity of variance assumption.

8. Levene's test for equality of variances demonstrated that the homogeneity of variance assumption was not upheld. The standard error in the single group was .12, in comparison to .08 for the divorced, and .05 for the continuously married group.

9. The index of dispersion used for this application measures both the number of changes in family structure and the distribution of time across these various family types. The formula for this index of dispersion is:

$$Nc\left[1-\left[\frac{\left(\sum|x-\bar{x}|\right)}{\sum x}\right]\right]$$

N_c = number of different family structures

x = number of years spent in each family structure

10. Junior high completion is defined as having completed Grade 9.

11. Levene's test for equality of variances demonstrated that the homogeneity of variance assumption was not upheld. The standard deviation within the grade 9 or less group was 1.6, in comparison to 1.2 for the grade 10 or more group. Thus, the t-test used is not based on the homogeneity of variance assumption.

12. The mother's opinions about the employment/care-giving mix were gaged by responses to the following matched choice items which were measured on a 5 point scale ranging from strongly agreed with one statement to strongly agreed with the alternative statement, with 3 being neutral. Chronbach's Alpha = .60 with a high score indicating the most liberal attitudes and a low score indicating the most conservative attitudes.

If you were advising a new mother about whether or not to give up her job when the baby was born, would you recommend that she keep her job because it might be difficult to get another one.	that she give up her job, if she could possibly manage without it.
When children are under school age it is possible for parents to work full time and meet their children's needs, if they have flexible jobs.	When children are under school age it is almost impossible to work full time and meet the needs of young children.
It doesn't hurt for mothers to be employed part time when their children are under school age.	Unless mothers have to be employed, it is best for them to be at home until their children are school age.
Once children reach school age it is fine for mothers to be employed while their children are at school.	It is best if mothers are not employed even when their children are at school.

In a two-parent family where both the mother and father have jobs that offer good salaries and the opportunity to work less than full time without negative consequences, do you feel it would be best for:

the father to be employed full time and the mother to be at home with the children.	for both the mother and father to spend less time working so that they can share the responsibilities of caring for their children.

13. The family income refers to the mother's reported family income. Thus, it is the mother's family income that is reported for the 20-year data collection even if the young person had established his/her own separate household at this time.

14. Scheffe Post Hoc tests showed significant differences across all groups.

    Despite the strong correlation between poverty and low grade completion, there is less consistent evidence that youth are being drawn out of the school system by employment. Young people who were employed during the summer or the school term during their last year in school were less likely to leave the school system $r = .11^{**}$ and $r = .10^{**}$, respectively. The scenerio of being drawn out of school by the lure of the work world is probably becoming less prevalent because of severely diminished job opportunities for youth. While a few of the male respondents in the FMP had left school to assume employment in family fishing and farming operations, such means of earning a livelihood are rare.

15. Chronbach's alpha = .78.

16. Chronbach's alpha = .75.

17. Chronbach's alpha = .78.

18. Chronbach's alpha = .73.

19. Chronbach's alpha = .83.

20. These findings are consistent with Ryan's (1998: 28) analyses showing that "positive parenting does not lead either to better academic focus or to achievement as the literature on parenting styles would suggest".

21. A low score refers to less than 4, mid range is a score of 4 to 4.2, and high is above 4.2.

22. A multiple regression including both the mother's and the teacher's rating of inattentiveness/ hyperactivity with the mother's reporting of difficulties during the teen years yielded significant independent effects for both the mother's ($ß = .15^{**}$) and the teacher's ($ß = .20^{***}$) assessments. There were also independent effects of mother's ($ß = .30^{***}$) and teacher's ($ß = .11^{*}$) ratings of aggressiveness. A cumulative risk measure was formed by summing these four risk measures defining below average ratings as "at risk". The correlation of this cumulative measure ranging form 0 to 4 with the mother's experiences of difficulties during the teen years was $r = .31^{***}$.

23. The young adults in the FMP were asked who, if anyone, had helped them with their homework. The list included mother, father, and other family members. A value of 0 indicates that the youth said none of these family members helped them with their homework, a value of 1 means that they had received some help from family members, and a value of 2 means they indicated that either, mother, father or some other family member helped them a lot.

24. Coleman emphasizes the mother's involvement with the school and school activities as one of the most critical networks for children's educational success. Mothers involved in the FMP were questioned about their involvement with the school both in terms of the frequency with which they were in contact with teachers and the frequency with which they attended school activities and events at the elementary, middle, and high school levels. Each item was measured on a three point scale with 0 - not very often or never, 1 - sometimes, and 2 - often. The total scale assumes a value of 12 if the mother indicated she often had contact with teachers and often attended activities at all three levels of schooling. Conversely, a value of 0 indicates the mother seldom had contact with teachers or attended activities at any level of schooling. In the vast majority of cases mothers were able to respond to all three levels of schooling, however, in a few cases the youth dropped out before entering high school. The high school value for these cases was assigned a mean value derived from other respondents who fit the profile of the mother's responses for elementary and middle school.

25. This association does not seem to be caused because mothers with lower levels of education have children who are struggling in school. There is not significant correlation between teacher's performance ratings at 10 years of age and mother's subsequent reporting that they stressed education as the most important thing to their children.

26. This is consistent with Ornstein's (1989) work showing that parents of all classes value education.

27. Chronbach's alpha = .50.

28. The national Youth in Transition Survey (Bowlby and McMullen, 2002: 36) also showed comparatively low participation in extracurricular activities among early school leavers.

29. Each of these areas was measured on a 4 point scale ranging from never to often. Chronbach's alpha = .58.

30. Each of these areas was measured on a 4 point scale ranging from never to often. Chronbach's alpha = .55.

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Appendix A

While the unweighted number of cases are given at the bottom of each column, the percentages provided in the tables are based on weighted data.

Table 1.1

Reasons for Leaving School by Gender

	Gender	
Reasons for Leaving School	Female	Male
Job/Money	0%	17%
Personal Reasons/Problems	33%	12%
Not Achieving	5%	26%
Did Not Fit In/Not Included	14%	13%
No Interest/Enjoyment	16%	12%
Asked to Leave	4%	9%
Pregnancy/Children	23%	1%
Illness/Health	5%	10%
Total N Unweighted	31	37

Table 1.2

Technical/Vocational Training by Gender

	Gender	
Technical/Vocational Training	Female	Male
Never Took Technical or Vocational Training	75%	73%
Took Technical or Vocational Training	25%	27%
Total N Unweighted	211	177

Table 1.3

University Training by Gender

	Gender	
University Training	Female	Male
Never Attended University	36%	46%
Ever Attended University	64%	54%
Total N Unweighted	211	177

Table 2.1

Early School Leaving by Full WISC-R

	Full WISC-R		
School Leaving	Below Average < 90	Average IQ 90 - 109	Above Average > 109
Left School at Some Time Before Grade 12	25%	10%	7%
Never Left School Before Completing Grade 12	75%	90%	93%
Total N Unweighted	25	94	56

Table 2.2

Full WISC-R by Early School Leaving

	Early School Leaving	
Full WISC-R	Left School at Some Time Before Grade 12	Never Left School Before Completing Grade 12
Low < 80	5%	3%
Low Average 80 - 89	21%	6%
Average 90 - 109	53%	56%
High Average 110 - 119	17%	14%
High > 119	4%	21%
Total N Unweighted	36	139

Table 3.1

Binary Logistic Regression Analysis for Early School Leaving by IQ and Teacher's Performance Rating at 10 Years of Age

	B	S.E.	Ward	Sig.	R	Odds
Teacher's Performance Rating at 10 years of age	-.01	.003	24.20	.0001	-.22	.99
Full WISC-R	-.01	.011	2.49	NS	-.03	.98

Total Unweighted N = 165

Table 3.2

Multiple Regression of Teacher's Performance Rating by Full WISC-R and Total Behavioural Assessment

Independent Variables	*Beta*
Full WISC-R	-.04
Teacher's Behavioural Assessment at 10 years of age	-.13**

R^2 = .57 Unweighted N = 203.

Table 3.3

Early School Leaving by Repetition of Grade(s)

	Repeated Grade(s)	
Early School Leaving	Yes	No
Left School at Some Time Before Grade 12	35%	4%
Never Left School Before Completing Grade 12	65%	96%
Total N Unweighted	120	302

Table 3.4

Binary Logistic Regression Analysis for Early School Leaving by IQ, Teacher's Performance Rating at 10 Years of Age, Teacher's Behaviour Rating at 10 Years of Age, and Repeating Grade(s)

	B	S.E.	Ward	Sig.	R	Odds
WISC-R	-.01	.01	.359	NS	.01	.99
Teacher's Performance Rating at 10 years of age	-.01	.01	.01	NS	0	1.00
Teacher's Behaviour Rating at 10 years of age	-.14	.06	5.35	.02	-.09	.87
repeated grade	-2.07	.40	27.18	.0001	-.24	.13

Total Unweighted N = 160

Table 3.5

Among Young People who Scored in the Average or Above IQ Range: Early School Leaving by Repetition of Grade(s)

	Repeated Grade(s)	
Early School Leaving	Yes	No
Left School at Some Time Before Grade 12	24%	2%
Never Left School Before Completing Grade 12	76%	98%
Total N Unweighted	45	105

Table 3.6

Early School Leaving by Youth's Perception of Teachers' Expectations

	Child's Feeling that Teachers Did Not Think they Would Do Well in Life	
Early School Leaving	Felt Teachers Did Not Think They Would Do Well	Felt Teachers Thought They Would Do Well
Left School at Some Time Before Grade 12	29%	8%
Never Left School Before Completing Grade 12	71%	92%
Total N Unweighted	79	312

Table 3.7

Early School Leaving by Youth's Perception of Fair Treatment by Teachers

Early School Leaving	Youth's Perception of Fair Treatment by Teachers: Did Not Feel Teachers Treated Students Fairly	Youth's Perception of Fair Treatment by Teachers: Felt Teachers Usually Treated Students Fairly
Left School at Some Time Before Grade 12	18%	9%
Never Left School Before Completing Grade 12	82%	91%
Total N Unweighted	108	284

Table 3.8

Early School Leaving by Youth's Perceptions of Teachers as Being Encouraging

Early School Leaving	Youth's Perceptions of Teachers as Being Encouraging: Did Not Feel Teachers Were Encouraging	Youth's Perceptions of Teachers as Being Encouraging: Felt Teachers Were Encouraging
Left School at Some Time Before Grade 12	18%	8%
Never Left School Before Completing Grade 12	82%	92%
Total N Unweighted	156	237

Table 3.9

Early School Leaving by Comfort Asking Questions at School

Early School Leaving	Comfort Asking Questions at School: Did Not Feel Comfortable Asking Questions at School	Comfort Asking Questions at School: Felt Comfortable Asking Questions at School
Left School at Some Time Before Grade 12	20%	9%
Never Left School Before Completing Grade 12	80%	91%
Total N Unweighted	103	289

Table 3.10

Early School Leaving by Youth's Perceptions of Teachers as Encouraging Students to Express Their Opinions

Early School Leaving	Perceptions of Teachers as Encouraging Students to Express Their Opinions: Felt Teachers Did Not Encourage Students to Express Their Opinions	Perceptions of Teachers as Encouraging Students to Express Their Opinions: Felt Teachers Encouraged Students to Express Their Opinions
Left School at Some Time Before Grade 12	29%	8%
Never Left School Before Completing Grade 12	71%	92%
Total N Unweighted	64	328

Table 3.11

Early School Leaving by Youth's Feeling of Safety at School

Early School Leaving	Youth Felt Safe at School: Always	Youth Felt Safe at School: Usually	Youth Felt Safe at School: Sometimes or Never
Left School at Some Time Before Grade 12	10%	15%	23%
Never Left School Before Completing Grade 12	90%	85%	77%
Total N Unweighted	282	89	22

Table 4.1

Early School Leaving by Family Structure

Early School Leaving	Family Structure: Lived in Lone Parent Family at Some Time Before the Age of 18	Family Structure: Never Lived in a Lone Parent Family Before the Age of 18
Left School at Some Time Before Grade 12	25%	5%
Never Left School Before Completing Grade 12	75%	95%
Total N Unweighted	178	215

Table 4.2

Technical/Vocational Training by Family Structure

	Family Structure	
Technical/Vocational Training	Lived in Lone Parent Family at Some Time Before the Age of 18	Never Lived in a Lone Parent Family Before the Age of 18
Never Took Technical or Vocational Training	73%	75%
Took Technical or Vocational Training	27%	25%
Total N Unweighted	174	214

Table 4.3

University Training by Family Structure

	Family Structure	
University Training	Lived in Lone Parent Family at Some Time Before the Age of 18	Never Lived in a Lone Parent Family Before the Age of 18
Never Attended University	58%	32%
Ever Attended University	42%	68%
Total N Unweighted	174	214

Table 4.4

One-way Analysis of Variance for Effects of Gender and Lone Parenting on Total Years of Schooling Completed

	Mean	SE
female never lived in lone-parent family	13.77	0.07
male never lived in lone-parent family	13.42	0.07
female lived in lone-parent family at some time	12.83	0.09
male lived in lone-parent family at some time	12.44	0.11

	F	Sig.
lived in lone-parent family	101.82	0.0001
gender	28.76	0.0001
gender * lived in lone-parent family	0.59	NS

Unweighted N = 388

Table 4.5

Early School Leaving by Mother's Marital Status

	Mother's Marital Status		
Early School Leaving	Single	Divorced	Continually Married
Left School at Some Time Before Grade 12	36%	19%	5%
Never Left School Before Completing Grade 12	64%	81%	95%
Total N Unweighted	113	104	210

Table 4.6

Technical/Vocational Training by Mother's Marital Status

Technical/Vocational Training	Mother's Marital Status: Single	Divorced	Continually Married
Never Took Technical or Vocational Training	75%	73%	74%
Took Technical or Vocational Training	25%	27%	26%
Total N Unweighted	93	95	199

Table 4.7

University Training by Mother's Marital Status

University Training	Mother's Marital Status: Single	Divorced	Continually Married
Never Attended University	68%	52%	32%
Ever Attended University	32%	48%	68%
Total N Unweighted	93	95	199

Table 4.8

Early School Leaving by Percentage of Time Spent in a Lone-Parent Family

Early School Leaving	Percentage of Time Spent in a Lone Parent Family Before Age 18: never lone-parent family	1 - 25% of the time	26 - 50% of the time	51 - 75% of the time	over 75% of the time
Left School at Some Time Before Grade 12	5%	17%	24%	24%	51%
Never Left School Before Completing Grade 12	95%	83%	76%	76%	49%
Total N Unweighted	201	87	59	20	26

Table 4.9

Technical/Vocational Training by Percentage of Time Spent in a Lone-Parent Family

	Percentage of Time Spent in a Lone Parent Family Before Age 18				
Technical/Vocational Training	never lone-parent family	1 - 25% of the time	26 - 50% of the time	51 - 75% of the time	over 75% of the time
Never Took Technical or Vocational Training	73%	76%	71%	71%	91%
Took Technical or Vocational Training	27%	24%	29%	29%	9%
Total N Unweighted	200	85	58	19	26

Table 4.10

University Training by Percentage of Time Spent in a Lone-Parent Family

	Percentage of Time Spent in a Lone Parent Family Before Age 18				
University Training	never lone-parent family	1 - 25% of the time	26 - 50% of the time	51 - 75% of the time	over 75% of the time
Never Attended University	32%	55%	51%	69%	68%
Ever Attended University	68%	45%	49%	31%	32%
Total N Unweighted	200	85	58	19	26

Table 5.1

Early School Leaving by Number of Changes in Family Structure

	Number of Changes in Family Structure			
Early School Leaving	No Changes	1	2	3 or more
Left School at Some Time Before Grade 12	5%	16%	22%	44%
Never Left School Before Completing Grade 12	95%	84%	78%	56%
Total N Unweighted	199	86	62	46

Table 5.2

Technical/Vocational Training by Number of Changes in Family Structure

	Number of Changes in Family Structure			
Technical/Vocational Training	No Changes	1	2	3 or more
Never Took Technical or Vocational Training	73%	75%	78%	71%
Took Technical or Vocational Training	27%	25%	22%	29%
Total N Unweighted	198	85	61	44

Table 5.3

University Training by Number of Changes in Family Structure

	Number of Changes in Family Structure			
University Training	No Changes	1	2	3 or more
Never Attended University	32%	53%	49%	76%
Ever Attended University	68%	47%	51%	24%
Total N Unweighted	198	85	61	44

Table 6.1

Early School Leaving by Age of Mother When First Child was Born

	Age of Mother When First Child was Born			
Early School Leaving	17 or Younger	18	19 to 24	25 or Older
Left School at Some Time Before Grade 12	38%	23%	14%	4%
Never Left School Before Completing Grade 12	62%	77%	86%	96%
Total N Unweighted	66	44	214	83

Table 6.2

Technical/Vocational Training by Age of Mother When First Child was Born

	Age of Mother When First Child was Born			
Technical/Vocational Training	17 or Younger	18	19 to 24	25 or Older
Never Took Technical or Vocational Training	76%	62%	74%	78%
Took Technical or Vocational Training	24%	38%	26%	22%
Total N Unweighted	60	35	196	77

Table 6.3

University Training by Age of Mother When First Child was Born

	Age of Mother When First Child was Born			
University Training	17 or Younger	18	19 to 24	25 or more
Never Attended University	70%	70%	45%	26%
Ever Attended University	30%	30%	55%	74%
Total N Unweighted	60	35	196	77

Table 7.1

Early School Leaving by Mother's Educational Attainment When First Child was Born

	Mother's Educational Attainment When First Child was Born		
Early School Leaving	Grade 9 or Less	Grade 10 or 11	Grade 12 or More
Left School at Some Time Before Grade 12	41%	9%	8%
Never Left School Before Completing Grade 12	59%	91%	92%
Total N Unweighted	67	110	192

Table 7.2

Technical/Vocational Training by Mother's Educational Attainment When First Child was Born

	Mother's Educational Attainment When First Child was Born		
Technical/Vocational Training	Grade 9 or Less	Grade 10 or 11	Grade 12 or More
Never Took Technical or Vocational Training	66%	66%	79%
Took Technical or Vocational Training	34%	34%	21%
Total N Unweighted	58	102	177

Table 7.3

University Training by Mother's Educational Attainment When First Child was Born

	Mother's Educational Attainment When First Child was Born		
University Training	Grade 9 or Less	Grade 10 or 11	Grade 12 or More
Never Attended University	93%	48%	28%
Ever Attended University	7%	52%	72%
Total N Unweighted	58	102	177

Table 8.1

Early School Leaving by Mother's Employment Status

	Mother's Employment Status		
Early School Leaving	Employed Full Time	Employed Part Time/Lack of Work	Employed Part Time by Choice
Left School at Some Time Before Grade 12	20%	12%	8%
Never Left School Before Completing Grade 12	80%	88%	92%
Total N Unweighted	131	62	186

Table 8.2

Technical/Vocational Training by Mother's Employment Status

	Mother's Employment Status		
Technical/Vocational Training	Employed Full Time	Employed Part Time/Lack of Work	Employed Part Time by Choice
Never Took Technical or Vocational Training	69%	73%	77%
Took Technical or Vocational Training	31%	27%	23%
Total N Unweighted	120	54	175

Table 8.3

University Training by Mother's Employment Status

	Mother's Employment Status		
University Training	Employed Full Time	Employed Part Time/Lack of Work	Employed Part Time by Choice
Never Attended University	47%	43%	33%
Ever Attended University	53%	57%	67%
Total N Unweighted	120	54	175

Table 8.4

Early School Leaving by Mother's Feelings of Being Torn Between Family and Job

	Mother's Feelings of Being Torn Between Family and Job				
Early School Leaving	Never	Not Very Often	Sometimes	Usually	Always
Left School at Some Time Before Grade 12	2%	7%	14%	12%	23%
Never Left School Before Completing Grade 12	98%	93%	86%	88%	77%
Total N Unweighted	39	80	166	59	61

Table 8.5

Technical/Vocational Training by Mother's Feelings of Being Torn Between Family and Job

	Mother's Feelings of Being Torn Between Family and Job				
Technical/Vocational Training	Never	Not Very Often	Sometimes	Usually	Always
Never Took Technical or Vocational Training	75%	78%	71%	71%	77%
Took Technical or Vocational Training	25%	22%	29%	29%	23%
Total N Unweighted	37	74	147	55	54

Table 8.6

University Training by Mother's Feelings of Being Torn Between Family and Job

	Mother's Feelings of Being Torn Between Family and Job				
University Training	Never	Not Very Often	Sometimes	Usually	Always
Never Attended University	48%	32%	39%	43%	47%
Ever Attended University	52%	68%	61%	57%	53%
Total N Unweighted	37	74	147	55	54

Table 9.1

Early School Leaving by Poverty Status

	Poverty Status		
Early School Leaving	Living in Poverty at 10 and 20 Years	Living in Poverty at Either 10 or 20 Years	Not Living in Poverty at Either 10 or 20 Years
Left School at Some Time Before Grade 12	42%	19%	9%
Never Left School Before Completing Grade 12	58%	81%	91%
Total N Unweighted	39	76	341

Table 9.2

Technical/Vocational Training by Poverty Status

Technical/Vocational Training	Poverty Status: Living in Poverty at 10 and 20 Years	Living in Poverty at Either 10 or 20 Years	Not Living in Poverty at Either 10 or 20 Years
Never Took Technical or Vocational Training	79%	62%	74%
Took Technical or Vocational Training	21%	38%	26%
Total N Unweighted	36	67	213

Table 9.3

University Training by Poverty Status

University Training	Poverty Status: Living in Poverty at 10 and 20 Years	Living in Poverty at Either 10 or 20 Years	Not Living in Poverty at Either 10 or 20 Years
Never Attended University	81%	53%	36%
Ever Attended University	19%	47%	64%
Total N Unweighted	36	67	213

Table 10.1

Early School Leaving by Number of Moves

Early School Leaving	Number of Moves: none	1	2	3	4	5 or more
Left School at Some Time Before Grade 12	1%	6%	11%	9%	13%	35%
Never Left School Before Completing Grade 12	99%	94%	89%	91%	87%	65%
Total N Unweighted	61	85	48	34	54	116

Table 10.2

Technical/Vocational Training by Number of Moves

	Number of Moves					
Technical/Vocational Training	none	1	2	3	4	5 or more
Never Took Technical or Vocational Training	66%	76%	78%	64%	79%	78%
Took Technical or Vocational Training	34%	24%	22%	36%	21%	22%
Total N Unweighted	60	83	47	32	47	101

Table 10.3

University Training by Number of Moves

	Number of Moves					
University Training	none	1	2	3	4	5 or more
Never Attended University	33%	33%	27%	57%	44%	58%
Ever Attended University	67%	67%	73%	43%	56%	42%
Total N Unweighted	60	83	47	32	47	101

Table 11.1

Early School Leaving by Quality of Living Accommodations

	Quality of Living Accommodations	
Early School Leaving	Unacceptable	Acceptable
Left School at Some Time Before Grade 12	34%	9%
Never Left School Before Completing Grade 12	66%	91%
Total N Unweighted	87	300

Table 11.2

Technical/Vocational Training by Quality of Living Accommodations

Technical/Vocational Training	Quality of Living Accommodations: Unacceptable	Quality of Living Accommodations: Acceptable
Never Took Technical or Vocational Training	85%	72%
Took Technical or Vocational Training	15%	28%
Total N Unweighted	77	284

Table 11.3

University Training by Quality of Living Accommodations

University Training	Quality of Living Accommodations: Unacceptable	Quality of Living Accommodations: Acceptable
Never Attended University	60%	38%
Ever Attended University	40%	62%
Total N Unweighted	77	284

Table 12.1

Pearson's Correlation Coefficients for Family Structure Variables

	2	3	4	5	6	7	8
stability of family structure (1)	-.65	.49	.38	.30	-.24	-.04	-.24
percentage two vs one-parent (2)		-.45	-.47	-.34	.23	.15	.38
number of moves (3)			.46	.54	-.33	-.13	-.27
ever received social assistance (4)				.39	-.40	-.30	-.50
unacceptable living accommodations (5)					-.25	-.14	-.24
mother's age (6)						.46	.30
mother's education (7)							.31
never lived in poverty (8)							

Table 13.1

Early School Leaving by Strict Application of Rules

	Strict Application of Rules		
Early School Leaving	Low	Medium	High
Left School at Some Time Before Grade 12	16%	4%	13%
Never Left School Before Completing Grade 12	84%	96%	87%
Total N Unweighted	251	98	67

Table 13.2

Technical/Vocational Training by Strict Application of Rules

	Strict Application of Rules		
Technical/Vocational Training	Low	Medium	High
Never Took Technical or Vocational Training	76%	75%	66%
Took Technical or Vocational Training	24%	25%	34%
Total N Unweighted	227	91	62

Table 13.3

University Training by Strict Application of Rules

	Strict Application of Rules		
University Training	Low	Medium	High
Never Attended University	48%	23%	45%
Ever Attended University	52%	77%	55%
Total N Unweighted	227	91	62

Table 13.4

Early School Leaving by Mother's Perception of Youth as a Difficult Teen

	Mother's Perception of Youth as Difficult Teen			
Early School Leaving	Not at all Difficult	Not Very Difficult	Somewhat Difficult	Very Difficult
Left School at Some Time Before Grade 12	2%	9%	18%	44%
Never Left School Before Completing Grade 12	98%	91%	82%	56%
Total N Unweighted	147	137	82	39

Table 13.5

Technical/Vocational Training by Mother's Perception of Youth as Difficult Teen

	Mother's Perception of Youth as Difficult Teen			
Technical/Vocational Training	Not at all Difficult	Not Very Difficult	Somewhat Difficult	Very Difficult
Never Took Technical or Vocational Training	72%	74%	72%	89%
Took Technical or Vocational Training	28%	26%	28%	11%
Total N Unweighted	136	129	76	32

Table 13.6

University Training by Mother's Perception of Youth as Difficult Teen

	Mother's Perception of Youth as Difficult Teen			
University Training	Not at all Difficult	Not Very Difficult	Somewhat Difficult	Very Difficult
Never Attended University	36%	35%	47%	68%
Ever Attended University	64%	65%	53%	32%
Total N Unweighted	136	129	76	32

Table 13.7

Early School Leaving by Early Departure From Parental Home

	Early Departure From Parental Home	
Early School Leaving	Left Home Before 18 Years of Age	Did Not Leave Home Before 18
Left School at Some Time Before Grade 12	58%	9%
Never Left School Before Completing Grade 12	42%	91%
Total N Unweighted	38	355

Table 13.8

Technical/Vocational Training by Early Departure From Parental Home

	Early Departure From Parental Home	
Technical/Vocational Training	Left Home Before 18 Years of Age	Did Not Leave Home Before 18 Years of Age
Never Took Technical or Vocational Training	90%	73%
Took Technical or Vocational Training	10%	27%
Total N Unweighted	38	350

Table 13.9

University Training by Early Departure From Parental Home

	Early Departure From Parental Home	
University Training	Left Home Before 18 Years of Age	Did Not Leave Home Before 18 Years of Age
Never Attended University	84%	38%
Ever Attended University	16%	62%
Total N Unweighted	38	350

Table 14.1

Binary logistic regression analysis for early school leaving by teacher's performance rating and time someone helped child with homework at 10 years of age

	B	S.E.	Ward	Sig.	R	Odds
Amount of time child received help with homework at home	.18	.11	2.59	NS	.04	1.20
Teacher's Performance Rating at 10 years of age	-.01	.01	22.75	.0001	-.27	.98

Total Unweighted N = 167

Table 15.1

Mother's Contact with Teachers Throughout Various Grade Levels

	Elementary	Middle	High School
A Lot	59%	32%	20%
Some	36%	55%	51%
Not Very Much	5%	13%	29%
Total N Unweighted	467	464	444

Table 15.2

Mother's Involvement in School Activities Throughout Various Grade Levels

	Elementary	Middle	High School
Often	86%	60%	45%
Sometimes	10%	26%	24%
Not Very Often	4%	14%	31%
Total N Unweighted	467	463	442

Table 15.3

Mother's Comfort Discussing Concerns With Teachers Throughout Various Grade Levels

	Elementary	Middle	High School
Very Comfortable	84%	69%	63%
Somewhat Comfortable	14%	24%	26%
Not Very Comfortable	2%	7%	11%
Total N Unweighted	466	460	438

Table 15.4

Early School Leaving by Mother's Perception of Youth Being Fairly Treated at School

	Fair Treatment	
Early School Leaving	Felt Child was Usually Treated Fairly	Did Not Feel Child was Usually Treated Fairly
Left School at Some Time Before Grade 12	10%	42%
Never Left School Before Completing Grade 12	90%	58%
Total N Unweighted	374	37

Table 15.5

Technical/Vocational Training by Mother's Perception of Youth Being Fairly Treated at School

	Fair Treatment	
Technical/Vocational Training	Felt Child was Usually Treated Fairly	Did Not Feel Child was Usually Treated Fairly
Never Took Technical or Vocational Training	74%	69%
Took Technical or Vocational Training	26%	31%
Total N Unweighted	347	32

Table 15.6

University Training by Mother's Perception of Youth Being Fairly Treated at School

University Training	Fair Treatment: Felt Child was Usually Treated Fairly	Fair Treatment: Did Not Feel Child was Usually Treated Fairly
Never Attended University	39%	71%
Ever Attended University	61%	29%
Total N Unweighted	374	32

Table 15.7

Early School Leaving by Mother's Experience of Significant Problem with School at Some Time

Early School Leaving	Significant Problem with School: Difficulty with School	Significant Problem with School: No Difficulty with School
Left School at Some Time Before Grade 12	17%	10%
Never Left School Before Completing Grade 12	83%	90%
Total N Unweighted	146	265

Table 15.8

Technical/Vocational Training by Mother's Experience of Significant Problem with School at Some Time

Technical/Vocational Training	Significant Problem with School: Difficulty with School	Significant Problem with School: No Difficulty with School
Never Took Technical or Vocational Training	71%	75%
Took Technical or Vocational Training	29%	25%
Total N Unweighted	132	247

Table 15.9

University Training by Mother's Experience of Significant Problem with School at Some Time

	Significant Problem with School	
University Training	Difficulty with School	No Difficulty with School
Never Attended University	49%	37%
Ever Attended University	51%	63%
Total N Unweighted	132	247

Table 15.10

Early School Leaving by Mother's Comfort Discussing Concerns with Teachers Among Youth who had Encountered Particular Problems

	Mother's Comfort Discussing Concerns With Teachers	
Early School Leaving	Felt Comfortable Discussing Concerns with Teachers	Did Not Feel Comfortable Discussing Concerns with Teachers
Left School at Some Time Before Grade 12	10%	26%
Never Left School Before Completing Grade 12	90%	74%
Total N Unweighted	59	87

Table 15.11

Early School Leaving by Mother's Perceptions of Fairness - Among Youth who had Encountered Particular Problems

	Fair Treatment	
Early School Leaving	Felt Child was Usually Treated Fairly	Did Not Feel Child was Usually Treated Fairly
Left School at Some Time Before Grade 12	15%	38%
Never Left School Before Completing Grade 12	85%	62%
Total N Unweighted	118	28

Table 16.1

Early School Leaving by Mother's Emphasis on Educational Attainment

Early School Leaving	Mother's Emphasis on Educational Attainment: Did Not Stress Education as Most Important	Mother's Emphasis on Educational Attainment: Stressed Education as Most Important
Left School at Some Time Before Grade 12	11%	15%
Never Left School Before Completing Grade 12	89%	85%
Total N Unweighted	207	203

Table 17.1

Early School Leaving by Youth's Participation in Extracurricular Activities at School

Early School Leaving	Youth's Participation in Extracurricular Activities at School: Often	Sometimes	Seldom	Never
Left School at Some Time Before Grade 12	8%	11%	17%	24%
Never Left School Before Completing Grade 12	92%	89%	83%	76%
Total N Unweighted	152	102	96	43

Table 17.2

Early School Leaving by Mother's Involvement in Community Activities

Early School Leaving	Mother's Involvement in Community Activities: Involved at 10 and 20 Years	Involved at Either 10 or 20 Years	Not Involved at Either 10 or 20 Years
Left School at Some Time Before Grade 12	8%	16%	26%
Never Left School Before Completing Grade 12	92%	84%	74%
Total N Unweighted	178	155	41

Appendix B

Table 1

Cognitive Ability	Left school before completing grade 12			Took some technical or vocational			Took some university			Total years of schooling		
	Total	F	M	Total	F	M	Total	F	M	Total	F	M
WISC-R:Full IQ	-.20*** (175)	-.15** (88)	-.24*** (87)	-.09* (156)	-.28*** (81)	.06 (75)	.35*** (156)	.29*** (81)	.39*** (75)	.38*** (155)	.28*** (81)	.46*** (74)
WISC-R: Performance IQ	-.13*** (176)	-.09 (89)	-.17*** (87)	-.04 (157)	-.17** (82)	.07 (75)	.20*** (157)	.17** (82)	.22*** (75)	.24*** (156)	.16** (82)	.30*** (74)
WISC-R: Verbal IQ	-.23*** (175)	-.16** (88)	-.30*** (87)	-.11** (156)	-.32*** (81)	.05 (75)	.40*** (156)	.32*** (81)	.48*** (75)	.42*** (155)	.30*** (81)	.52*** (74)
BASIS: math standard score	-.24*** (177)	-.22*** (89)	-.28*** (88)	-.13*** (158)	-.24*** (82)	-.01 (76)	.28*** (158)	.44*** (82)	.13* (76)	.22*** (157)	.22*** (82)	.23*** (75)
BASIS: reading standard score	-.22*** (176)	-.16** (89)	-.30*** (97)	-.03 (157)	-.08 (82)	.03 (75)	.34*** (157)	.36*** (82)	.30*** (75)	.33*** (156)	.25*** (82)	.39*** (74)
BASIS: spelling standard score	-.11** (177)	-.06 (89)	-.18*** (88)	-.11** (158)	-.23*** (82)	.01 (76)	.25*** (158)	.34*** (82)	.11* (76)	.20*** (157)	.11* (82)	.25*** (75)
BASIS: writing sample	-.10** (164)	-.04 (85)	-.21*** (79)	-.08* (146)	-.21*** (78)	.04 (68)	.31*** (146)	.38*** (78)	.23*** (68)	.27*** (145)	.23*** (78)	.30*** (67)
Beery: age equivalent	-.14*** (176)	-.15** (88)	-.14** (88)	-.22*** (157)	-.29*** (81)	-.15** (76)	.29*** (157)	.27*** (81)	.32*** (76)	.26*** (156)	.22*** (81)	.29*** (75)
PPVT-R	-.20*** (177)	-.07 (89)	-.31*** (88)	-.13*** (158)	-.35*** (82)	.03 (76)	.32*** (158)	.23*** (82)	.40*** (76)	.36*** (157)	.27*** (82)	.43*** (75)

Table 2

Self Concept	Left school before completing grade 12			Took some technical or vocational			Took some university			Total years of schooling		
	Total	F	M	Total	F	M	Total	F	M	Total	F	M
Piers Harris: stanine	-.04 (176)	-.13* (89)	.03 (87)	-.08* (158)	-.21*** (82)	.04 (76)	.31*** (158)	.34*** (82)	.24*** (76)	.33*** (157)	.33*** (82)	.31*** (75)
Piers Harris: behaviour cluster	-.08* (176)	-.17** (89)	-.05 (87)	-.04 (158)	-.20*** (82)	.06 (76)	.22*** (158)	.38*** (82)	.09 (76)	.20*** (157)	.25*** (82)	.15** (75)
Piers Harris: intellectual/school status cluster	-.04 (176)	-.10 (89)	.01 (87)	-.06 (158)	-.14** (82)	.01 (76)	.22*** (158)	.41*** (82)	.06 (76)	.26*** (157)	.30*** (82)	.21*** (75)
Piers Harris: physical appearance/attributes cluster	-.04 (176)	-.08 (89)	.01 (87)	.09* (158)	.01 (82)	.16** (76)	.09* (158)	.21*** (82)	-.02 (76)	.22*** (157)	.33*** (82)	.13* (75)
Piers Harris: anxiety cluster	.01 (176)	-.02 (89)	.02 (87)	-.09* (158)	-.19*** (82)	.01 (76)	.15*** (158)	.18*** (82)	.10* (76)	.14*** (157)	.11* (82)	.16** (75)
Piers Harris: popularity cluster	-.02 (176)	.07 (89)	-.12* (87)	-.01 (158)	-.16** (82)	.13** (76)	.10** (158)	.18*** (82)	-.01 (76)	.13*** (157)	.10* (82)	.13** (75)
Piers Harris: happiness/satisfaction cluster	.04 (176)	-.05 (89)	.13** (87)	.04 (158)	-.05 (82)	.13** (76)	.16*** (158)	.19*** (82)	.13** (76)	.23*** (157)	.28 (82)	.18*** (75)

Table 3

School Experiences	Left school before completing grade 12			Took some technical or vocational			Took some university			Total years of schooling		
	Total	F	M	Total	F	M	Total	F	M	Total	F	M
Teacher's Achenbach: behaving appropriately scale	-.23*** (165)	-.35*** (82)	-.19*** (83)	.12** (147)	.03 (75)	.26*** (72)	.10** (147)	.12* (75)	-.08 (72)	.18*** (146)	.17** (75)	.12* (71)
Teacher's Achenbach: learning scale	-.28*** (164)	-.31*** (81)	-.30*** (83)	-.10** (146)	-.34*** (74)	.09 (72)	.32*** (146)	.38*** (74)	.19*** (72)	.43*** (145)	.35*** (74)	.47*** (71)
Teacher's Achenbach: happy scale	-.28*** (164)	-.26*** (82)	-.35*** (82)	.02 (146)	-.27*** (75)	.27*** (71)	.33*** (146)	.31*** (75)	.27*** (71)	.44*** (145)	.32*** (75)	.52*** (70)
Teacher's Achenbach: total social scale	-.30*** (164)	-.39*** (82)	-.30*** (82)	.01 (146)	-.18*** (75)	.19*** (71)	.27*** (146)	.33*** (75)	.11* (71)	.38*** (145)	.32*** (75)	.41*** (70)
Teacher's Achenbach: total anxious scale	.05 (167)	-.04 (82)	.15** (85)	-.03 (149)	.22*** (75)	-.29*** (74)	.02 (149)	-.04 (75)	.06 (74)	-.05 (148)	.01 (75)	-.13** (73)
Teacher's Achenbach: total social withdrawal scale	.14*** (167)	.09 (82)	.18*** (85)	-.20** (149)	.08 (75)	-.24*** (74)	-.02 (149)	-.01 (75)	-.01 (74)	-.12** (148)	.02 (75)	-.22*** (73)
Teacher's Achenbach: total unpopular scale	.05 (167)	.08 (82)	.06 (85)	-.09* (149)	.10 (75)	-.19*** (74)	-.12*** (149)	-.16** (75)	-.05 (74)	-.20*** (148)	-.25*** (75)	-.18*** (73)
Teacher's Achenbach: total inattentive scale	.23*** (167)	.39*** (82)	.20*** (85)	-.12*** (149)	.04 (75)	-.25*** (74)	-.13*** (149)	-.31*** (75)	.05 (74)	-.30*** (148)	-.39*** (75)	-.23*** (73)
Teacher's Achenbach: total nervous overactive scale	.10** (167)	.21*** (82)	.08 (85)	.09* (149)	.08 (75)	.07 (74)	-.06 (149)	-.20*** (75)	.11* (74)	-.09** (148)	-.23*** (75)	.02 (73)
Teacher's Achenbach: total aggressive scale	.08* (167)	.29*** (82)	.02 (85)	-.01 (149)	.07 (75)	-.05 (74)	.01 (149)	-.32*** (75)	.22*** (74)	.01 (148)	-.32*** (75)	.18*** (73)
Youth's perception of school environment	-.32*** (391)	-.26*** (213)	-.38*** (178)	-.05 (386)	-.12** (210)	.02 (176)	.24*** (386)	.21*** (210)	.24*** (176)	.31*** (385)	.25*** (210)	.34*** (175)

Table 4

Structural Characteristics of Family	Left school before completing grade 12			Took some technical or vocational			Took some university			Total years of schooling		
	Total	F	M	Total	F	M	Total	F	M	Total	F	M
Percentage of time lived in two-parent vs one-parent family	-.34*** (393)	-.35*** (214)	-.36*** (179)	.03 (388)	-.01 (211)	.07 (177)	.23*** (388)	.24*** (211)	.24*** (177)	.34*** (388)	.34*** (211)	.38*** (177)
Ever lived in lone-parent family	.29*** (393)	.30*** (214)	.29*** (179)	.01 (388)	.06 (211)	-.04 (177)	-.26*** (388)	-.31*** (211)	-.21*** (177)	-.29*** (388)	-.35*** (211)	-.26*** (177)
Stability of family unit	.35*** (393)	.42*** (214)	.30*** (179)	-.01 (388)	.02 (211)	-.04 (177)	-.23*** (388)	-.31*** (211)	-.15*** (177)	-.29*** (388)	-.36*** (211)	-.26*** (177)
Mother's age	-.21*** (429)	-.15*** (228)	-.28*** (201)	-.05 (388)	-.10* (211)	.01 (177)	.29*** (388)	.26*** (211)	.35*** (177)	.33*** (388)	.31*** (211)	.40*** (177)
Mother's total number of years of education	-.21*** (422)	-.15*** (223)	-.27*** (199)	-.10*** (383)	-.15*** (207)	-.06 (176)	.33*** (383)	.31*** (207)	.36*** (176)	.35*** (383)	.33*** (207)	.40*** (176)
Mother had grade 9 or less when first child was born	.30*** (369)	.34*** (196)	.26*** (173)	.06 (337)	.01 (181)	.12** (156)	-.36*** (337)	-.35*** (181)	-.37*** (156)	-.41*** (337)	-.43*** (181)	-.39*** (156)
Mother's total number of years of employment	.03 (359)	.04 (193)	.02 (166)	.01 (337)	.08 (184)	-.06 (153)	.06 (337)	-.04 (184)	.16*** (153)	.11*** (337)	.07 (184)	.15*** (153)
Mother employed when child was under 5 years of age	.08** (386)	.08* (205)	.08 (181)	-.05 (355)	-.01 (192)	-.09* (163)	.01 (355)	-.01 (192)	.05 (163)	-.04 (355)	-.03 (192)	-.04 (163)
Mother employed when child was 5 to 10 years of age	.09** (386)	.07 (205)	.12** (181)	.01 (355)	.09* (192)	-.08 (163)	-.01 (355)	-.02 (192)	.01 (163)	-.02 (355)	.01 (192)	-.05 (163)
Mother employed when child was over 10 years of age	-.04 (412)	.03 (220)	-.10* (192)	.01 (380)	.07 (207)	-.05 (173)	.11*** (380)	.05 (207)	.17*** (173)	.15*** (380)	.11** (207)	.20*** (173)
Mother's opinions about employment child rearing mix	.03 (351)	-.01 (188)	.10* (163)	-.04 (324)	-.08 (175)	.03 (149)	-.02 (324)	-.03 (175)	-.05 (149)	-.01 (324)	.02 (175)	-.09 (149)
Child cared for by other family member when mother was at work	.06 (292)	.06 (151)	.06 (141)	.02 (271)	.01 (143)	.04 (128)	-.06 (271)	-.04 (143)	-.09 (128)	-.04 (271)	-.05 (143)	-.03 (128)
Family never lived below poverty line	-.21*** (341)	-.17*** (180)	-.25*** (161)	-.07* (316)	-.14** (170)	-.01 (146)	.22*** (316)	.21*** (170)	.25*** (146)	.23*** (316)	.20*** (170)	.28*** (146)
Total number of moves	.33*** (398)	.30*** (213)	.37*** (185)	-.06* (370)	.05 (202)	-.19*** (168)	-.20*** (370)	-.24*** (202)	-.18*** (168)	-.28*** (370)	-.27*** (202)	-.32*** (168)
Mother had sometimes found living accommodations unacceptable	.28*** (387)	.24*** (205)	.32*** (182)	-.12*** (361)	-.09* (196)	-.14** (165)	-.17*** (361)	-.18*** (196)	-.16*** (165)	-.26*** (361)	-.26*** (196)	-.26*** (165)

Table 5

Family Dynamics	Left school before completing grade 12			Took some technical or vocational			Took some university			Total years of schooling		
	Total	F	M	Total	F	M	Total	F	M	Total	F	M
Mother reported no one else helping care for child at 10 years of age	.13*** (380)	.17*** (201)	.10* (179)	.06 (348)	.10* (189)	.01 (159)	-.07* (348)	-.06 (189)	-.07 (159)	-.13*** (348)	-.10* (189)	-.15** (159)
Extent to which child rearing responsibilities generally were shared	.11*** (409)	.04 (217)	.18*** (192)	.11*** (377)	.17*** (204)	.05 (173)	-.12*** (377)	-.06 (204)	-.20*** (173)	-.07* (377)	-.05 (204)	-.14** (173)
Mother reported primary responsibility for all aspects of child rearing	.17*** (409)	.14*** (217)	.19*** (192)	-.02 (377)	.05 (204)	-.10* (173)	-.06* (377)	-.13** (204)	.01 (173)	-.12*** (377)	-.13** (204)	-.12** (173)
Parenting practices at 10: praise	-.01 (416)	-.12** (220)	.12** (196)	.04 (379)	.02 (205)	.06 (174)	-.09** (379)	-.01 (205)	-.19*** (174)	-.05 (379)	.05 (205)	-.15*** (174)
Parenting practices at 10: quality time	-.06* (413)	-.07 (220)	-.05 (193)	.05 (376)	-.03 (205)	.15*** (171)	-.08** (376)	.02 (205)	-.19*** (171)	-.01 (376)	.03 (205)	-.01 (171)
Parenting practices at 10: physical punishment	.07** (416)	.15*** (220)	.01 (196)	-.05 (379)	-.01 (205)	-.10* (174)	.05 (379)	-.04 (205)	.13** (174)	-.03 (379)	.01 (205)	-.05 (174)
Parenting practices at 10: negative assessment of child's behaviour	.15*** (416)	.16*** (221)	.14** (195)	.01 (379)	-.03 (206)	.06 (173)	-.11*** (379)	-.05 (206)	-.19*** (173)	-.12*** (379)	-.08 (206)	-.17*** (173)
Mother's Achenbach: total social withdrawal	.08* (176)	.14** (89)	-.04 (87)	.05 (157)	.13* (82)	-.05 (75)	-.03 (157)	-.17** (82)	.05 (75)	.09* (156)	.02 (82)	.12* (74)
Mother's Achenbach: total hyperactive	.12*** (176)	.19*** (89)	.01 (87)	-.04 (157)	.03 (82)	-.12* (75)	-.27*** (157)	-.42*** (82)	-.12* (75)	-.18*** (156)	-.26*** (82)	-.10* (74)
Mother's Achenbach: total aggressive	.15*** (176)	.24*** (89)	.03 (87)	-.08* (157)	.13** (82)	-.33*** (75)	-.20*** (157)	-.41*** (82)	.01 (75)	-.15*** (156)	-.23*** (82)	-.09 (74)
Mother's perception of youth as difficult teen	.40*** (405)	.41*** (217)	.40*** (188)	-.06* (373)	-.01 (204)	-.13** (169)	-.16*** (373)	-.21*** (204)	-.11* (169)	-.30*** (373)	-.29*** (204)	-.35*** (169)
Youth did not leave parental home before 18 years of age	-.37*** (393)	-.57*** (214)	-.16*** (179)	.09** (388)	.11** (211)	.07 (177)	.23*** (388)	.28*** (211)	.18*** (177)	.32*** (388)	.43*** (211)	.22*** (177)
Amount of help with homework child received from family members	.01 (424)	-.06 (226)	.07 (198)	.07* (385)	.04 (209)	.10* (176)	-.04 (385)	.01 (209)	-.09* (176)	-.02 (385)	.02 (209)	-.07 (176)
Number of hours of help with homework at 10 years of age	.11*** (384)	.12** (202)	.09* (182)	.01 (352)	.09* (190)	-.05 (162)	-.06* (352)	-.21*** (190)	.04 (162)	-.09** (352)	-.17*** (190)	-.02 (162)
Mother's contact with school and involvement in school activities	-.10*** (410)	-.03 (218)	-.19*** (192)	-.10** (378)	-.11** (205)	-.09 (173)	.21*** (378)	.11** (205)	.37*** (173)	.15*** (378)	.12** (205)	.23*** (173)

Table 5 continued

Family Dynamics	Left school before completing grade 12			Took some technical or vocational			Took some university			Total years of schooling		
	Total	F	M	Total	F	M	Total	F	M	Total	F	M
Mother's comfort discussing difficulties with teachers	-.17*** (409)	-.15*** (217)	-.18*** (192)	.01 (377)	.02 (204)	.01 (173)	.08* (377)	.11** (204)	.05 (173)	.12*** (377)	.13** (204)	.11** (173)
Mother felt son/daughter was not treated fairly by schools	.18*** (411)	.17*** (219)	.18*** (192)	.01 (379)	-.07 (206)	.06 (173)	-.13*** (379)	-.10** (206)	-.13** (173)	-.14*** (379)	-.14*** (206)	-.12** (173)
Mother stressed importance of education	.05 (410)	.10* (219)	.03 (191)	-.05 (379)	.01 (206)	-.12** (173)	.01 (379)	-.01 (206)	.01 (173)	-.01 (379)	-.07 (206)	-.01 (173)
Mother's opinions about learning and education	-.02 (412)	-.02 (220)	-.02 (192)	-.02 (380)	-.08 (207)	.05 (173)	.11*** (380)	.13** (207)	.08 (173)	.04 (380)	.02 (207)	.05 (173)
Youth's involvement in extra-curricular activities offered by school	-.14*** (393)	-.10** (214)	-.17*** (179)	-.13*** (388)	-.10** (211)	-.15*** (177)	.27*** (388)	.22*** (211)	.31*** (177)	.23*** (388)	.23*** (211)	.21*** (177)
Youth's socializing with friends outside school time	-.02 (428)	-.02 (228)	-.01 (200)	-.07* (388)	-.08* (211)	-.05 (177)	.12*** (388)	.15*** (211)	.08 (177)	-.01 (388)	.09* (211)	-.13** (177)
Youth's involvement in community groups	-.16*** (426)	-.08 (227)	-.21*** (199)	-.04 (387)	-.06 (210)	-.01 (177)	.21*** (387)	.20*** (210)	.18*** (177)	.26*** (387)	.23*** (210)	.22*** (177)

Notes on Contents of Tables

- The correlations presented in the above tables are based on weighted data as described in the Methodology report for the FMP.
- The measure of association reported is Pearson's Product Moment Correlation Coefficient.
- Because measures of significance are artificially inflated through weighting, all correlations have been double checked using unweighted data. Only those correlations that remain statistically significant in the unweighted data are reported in the text. Any substantive disparities between weighted and unweighted correlations are reported in the endnotes.
- Variables that have relatively few cases in some parts of the distribution have been analyzed using both the original and a recoded distribution to determine the extent to which the correlation reported may be affected by a few relatively extreme cases. For example, while the number of siblings ranges from 0 to 8, family sizes above 4 children are relatively uncommon. In this instance, the full range of number of siblings is used in the correlation table but the correlation also has been assessed using a reconstituted variable where the highest value of 4 represents 4 or more siblings. A comparison of these two correlations provides a general idea of whether the correlation between the number of siblings is primarily due to unusually high family sizes or has an effect even at more common levels.
- All associations have also been examined for linearity. Pearson's Product Moment Correlation Coefficent is not appropriate for non-linear relationships. For example, in the case of parenting styles, the effect of strict application of rules was not linear, as described in text.
- * $p < .05$, ** $p < .01$, *** $p < .001$
- The psychological assessments including the WISC-R, BASIS, Beery, and Piers Harris were only conducted for a subsample of 223 children at the time of the 10-year interview. See methodology report for more detailed information.